



Mississippi School Nurse Procedures & Standards of Care

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Health, and the Mississippi School Nurse Association*



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SCHOOL NURSING PRACTICE

1.1 Introduction

This section contains information about the practice of school nursing in Mississippi. School nursing practice is based on the *Mississippi Nurse Practice Act* and the corresponding *Rules and Regulations*, the *Scope and Standards of Nursing Clinical Practice*, the *Scope and Standards of School Health Nursing Practice*, and sound professional judgment.

The job description and detailed school nursing duties have been designed to broadly describe school nursing practice in any of the existing models in the state. Not every school nurse will be expected to carry out every activity in these documents. The school nurse and the supervisor should review the materials carefully and adjust the individual school nurse's job duties in accordance with the model in place at the individual school.

It is the responsibility of the school nurse to maintain a current, unrestricted nursing license and to be familiar with the scope of practice in the school setting. Schools are different than more traditional health care settings, and there is more opportunity for the school nurse to have questions related to practice. However, with preparation and diligence, a school nurse can practice safely and competently in any school in Mississippi.

The National Association of School Nurses website has materials related to the role of the school nurse, comprehensive school health, delegation of duties, and other similar reference documents. They can be accessed at www.nasn.org.

1.1.1 SCHOOL NURSE DELIVERY MODELS

School nurses may be employed in a variety of delivery models in Mississippi. All of them are viable, productive models aimed at providing health services to the school-age children in the state. Which model a school district selects should depend on the school district's assessment of its needs as well as the resources it has to support the chosen model.

TRADITIONAL SCHOOL NURSE

Historically the most utilized model in Mississippi, it allows for one or more school nurses to be present, depending on the school district's preference and resources. The job description may vary from school to school, so it should be negotiated by the school and/or the district along with the nurse. Their salaries are typically paid from Title I funds, from school district funds, from private funds, or from legislative funding.

SCHOOL NURSE "COOL KIDS" PROGRAM

Funded by the Bower Foundation initially, this model has one or more school nurses employed by the local school district—medical backup provided by the local medical community or community health center—to provide direct clinic-based nursing services. Those services are modeled after Mississippi Division of Medicaid's Cool Kids Program, (formerly EPSDT) but are not limited to those services. Under this model, the ultimate goal of the clinic is to become self-supporting under Medicaid reimbursement.

COMPREHENSIVE SCHOOL-BASED CLINICS

This model represents generally comprehensive, full-service school-based health clinics, complete on-site with all providers on call (i.e., nurse practitioners, physicians,



counselors, social workers, etc.), although some staff may not be housed in the school on a full-time basis. Some of the school-based clinics have a direct relationship with the local hospital system.

1.2 JOB DESCRIPTION

School nursing practice requires the combination of professional clinical nursing practice with a specialized component that promotes the health, well-being, academic achievement, and success of the school-age child.

The school nurse is often the only health care provider in the school setting; therefore, school nurses may be called upon to work closely with teachers, classroom assistants, office personnel, and other unlicensed staff in order to carry out a wide range of school health activities.

Knowledge of the applicable practice laws and regulations is essential for the school nurse to practice within the scope of the RN license.

1.2.1 DEFINITION

A school nurse is a registered professional nurse who has experience in pediatrics, community health, public health, or other similar areas and who utilizes skills in health promotion, assessment, referral, communication, management, and leadership to carry out the requirements of the job.

1.2.2 NATURE OF THE WORK

- Provide preventive health services to facilitate the student's optimal physical, mental, emotional, and social growth and development.
- Identify problems and disabilities and provide such services as case examination, health education, referral and care in order to help prevent serious health problems which would later be more difficult and costly to address.
- Support the educational process by working to assure the health of the students.
- Follow standard nursing process of assessment, diagnosis, outcome identification, planning, implementation, and evaluation, in all cases.

Examples of Work

The following examples are intended as illustrations of various types of work performed in positions allocated to this classification. No attempt is made to be exhaustive. Related, similar or logical duties are performed as may be assigned or self-determined.

- Promote and protect the optimal health status of school-age children.
- Provide health assessments.
- Obtain health histories.
- Screen and evaluates findings of deficiencies in vision, hearing, scoliosis, growth, etc.
- Observe children for development and health patterns in making nursing assessment.
- Identify abnormal health findings.
- Develop and implement a health plan.
- Interpret the health status of students to parents/guardians and school personnel.
- Initiate referrals to parents/guardians, school personnel or community health resources for intervention, remediation and follow-through.
- Provide ongoing health counseling with students, parents/guardians, school personnel, or health agencies.
- Utilize existing health resources to provide appropriate care of students.
- Maintain, evaluate, and interpret cumulative health data to accommodate individual needs of students.



- Plan and implement school health management protocols.
- Participate in home visits to assess the family's needs as related to the child's health.
- Develop procedures for and execute emergency nursing management for injuries/illnesses and in disaster preparedness and response.
- Promote and assist in the control of communicable diseases.
- Provide health education.
- Provide direct health education and health counseling to assist students and families in making decisions on health and on lifestyles that affect health.
- Participate in health education directly and indirectly for the improvement of health by teaching persons to become more assertive health consumers and to assume greater responsibility for their own health.
- Counsel students concerning problems such as pregnancy, sexually transmitted diseases, and substance abuse in order to facilitate responsible decision-making practices.
- Serve as a resource person to the school staff members in health instruction.
- Coordinate school and community health activities and serve as a liaison health professional between the home, school, and community.
- Act as a resource person in promoting health careers.
- Engage in research and evaluation of school health services to act as a change agent for school health programs and school nursing practices.
- Provide consultation in the formation of health policies, goals, and objectives for the school district.
- Participate in Individual Education Plan development (where applicable).

1.2.3 REQUIREMENTS

MINIMUM REQUIREMENTS

- Qualified to practice as a Registered Nurse in the State of Mississippi (or a compact state) and holds an unrestricted license.
- Certified in CPR or BLS (or will obtain in the first 12 months of hire).

ADDITIONAL RECOMMENDATIONS

- B.S.N. or Registered Nurse with a bachelor's degree in a related discipline.
- Minimum of one (1) year's experience in public health nursing, community health nursing, school nursing, or pediatric nursing.
- Certified as a School Health Nurse.

KNOWLEDGE BASE

- Principles and practices underlying professional nursing.
- Principles and practices underlying the special field of school health.
- Current trends in nursing and of literature in the field of school health.
- Organization and administration of other cooperating agencies.
- State and local laws relating to health and social issues.

ABILITIES

- Participate cooperatively in a program of school nursing.
- Exercise professional judgment in making decisions.
- Utilize appropriate communication techniques with students and school personnel.
- Demonstrate a genuine interest in the student population and its health needs.



1.3 Detailed Duties & Functions

1.3.1 OBLIGATION TO SCHOOL STAFF

1.3.1-a Prevent & Control Communicable Disease

OBJECTIVE

To function as a collaborative member of the school staff in all aspects of the school health program.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of school district policies.
- Knowledge of federal, state, and county laws and regulations pertinent to school nursing services.
- Knowledge of the total school program.

RESPONSIBILITIES

- Participate in establishing or revising school and district health policies.
- Comply with school and district policies.
- Comply with federal, state, and county laws.
- Interpret school health legal provisions to school administrators.
- Alert school administrators to health trends and problems.
- Explain district educational philosophy and policies (when appropriate).
- Attend and participate in faculty, staff, and community meetings (when appropriate).
- Work effectively with other school personnel.
- Assist in planning all or part of the school health budget (if appropriate).
- Determine criteria for qualifications and functions of health para-professionals (if appropriate).
- Orient, supervise, and evaluate the performance of health para-professionals (when appropriate).
- Counsel staff members regarding personal and family health problems.
- Join and participate in local, professional, and educational associations.

1.3.1-b Provide Health Instruction

OBJECTIVE

To assure that each student understands the benefits of a healthy lifestyle.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of materials and methods of health instruction.
- Ability to stimulate teachers to incorporate health concepts into their curriculum.
- Ability to serve as a demonstration health teacher.
- Ability to evaluate health education materials and curriculum for scientific accuracy and learning effectiveness.

RESPONSIBILITIES

- Stimulate the incorporation of health instruction in the school curriculum and in the classroom (when appropriate).
- Continually seek out and evaluate new materials and community resources.
- Recommend teacher and student instructional materials for purchase.
- Serve as a resource to individual teachers and students regarding self-care and health consumerism.
- Team-teach or be a resource speaker at the request of the classroom teacher or principal.
- Plan and conduct health consumer education programs.



- Plan and conduct sun safety and skin cancer prevention programs.

1.3.1-c Provide Health Instruction about Human Reproduction

OBJECTIVE

To assist students in the attainment of factual information regarding pubertal changes, adolescent sexuality, abstinence, and contraception.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of the anatomy and physiology of the adolescent reproductive system.
- Knowledge of pubertal changes and adolescent sexuality.
- Knowledge of current information to promote the teaching of abstinence.
- Knowledge of current trends in contraceptive technology.
- Ability to impart sensitive information in a professional manner.

RESPONSIBILITIES

- Comply with school policies regarding the delivery of reproductive health instruction.
- Include the teaching of total abstinence from sex until marriage as the preferred and most responsible method of preventing teen pregnancy and sexually transmitted diseases.
- Plan, with the teacher, the practicality of providing reproductive health education in classrooms divided according to gender.
- Comply with agency policy and advisory board recommendations in the provision and planning of reproductive health instruction.
- Provide opportunities for parental/guardian access and review of all materials used in reproductive health instruction.

1.3.1-d Encourage Good Nutrition

OBJECTIVE

To assure a well-nourished school population.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to teach nutrition concepts to students and staff.
- Ability to stimulate teachers to incorporate nutrition concepts into the curriculum.
- Ability to evaluate nutrition education material for scientific accuracy and learning effectiveness.
- Knowledge of nutritional values of individual foods, including ethnic foods.

RESPONSIBILITIES

- Identify students who have nutrition problems.
- Counsel parent/guardian and students for remediation of nutrition problems. Refer eligible students to free and reduced priced meal programs.
- Develop a health maintenance plan with student, parent/guardian, and other school personnel (as indicated).
- Refer for medical evaluation and/or treatment.
- Organize and sponsor weight control programs for students.
- Know school policy regarding free and reduced priced meals program.
- Coordinate nutrition instruction with the food service and/or school lunch program (or confer with health department nutritionist).
- Serve as a resource for student participation in food service menu planning.
- Stimulate student participation in establishing a pleasant climate and environment in the cafeteria.



1.3.1-e Define & Implement Emergency Care for Accidents

OBJECTIVE

To set and maintain standards of emergency care to minimize the effects of accidents in the school.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to assess the severity of injuries.
- Ability to perform first aid procedures effectively and efficiently.
- Ability to teach first aid procedures.
- Knowledge of legal aspects of emergency care.
- Ability to analyze the cause of an accident.
- Knowledge of disaster and fire plans for school and community.

RESPONSIBILITIES

- Assume leadership in the development and periodic revision of first aid policies.
- Ascertain that the adopted policies are available to all school personnel.
- Plan or conduct staff development programs on first aid and cardiopulmonary resuscitation for all school personnel.
- Direct the response to major accidents on school property.
- Assume responsibility for those portions of the accident report as designated by school policy.
- Analyze accidents for safety hazards and report to appropriate personnel.
- Conduct individual conferences with student(s) involved regarding applicable safety practices.
- Assist teachers with immediate health education as related to specific accidents.

1.3.1-f Define & Implement Emergency Care for Illness

OBJECTIVE

To set and maintain standards of emergency care to minimize the effects of illnesses in the school.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to assess severity of illness with plan for nursing intervention.

RESPONSIBILITIES

- Assume leadership in the development and periodic review of policies for caring for ill students.
- Plan and conduct staff development programs on identification of ill students for all school personnel.
- Evaluate student's symptoms and behavior and develop health care plan or refer as appropriate.
- Remove student from classroom as appropriate to illness.
- Contact parents/guardians regarding necessary follow-up appointments, etc.
- Conduct student and/or parent-school nurse conference regarding self care, health care plan, or referral.
- Inform referring teacher of the management of student's complaint.
- Conduct health counseling sessions with student and/or parent/guardian for repeated episodes of illness.

Note: Since September 11, 2001, and the increased emphasis on emergency preparedness, the school nurse may have a role in the preparation for and response to emergency preparedness. The school nurse should seek guidance from the school district, the local health department, and other partners in emergency preparedness to develop an understanding of his or her role during and after disasters. There are also evolving guidelines on www.nasn.org.



1.3.1-g Arrange Transportation of Ill or Injured

OBJECTIVE

To set and maintain protocol for notification and transportation of ill or injured to maximize recovery and minimize effects in the school.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of student records and content information.
- Ability to assess severity of injury or illness.
- Ability to communicate effectively.

RESPONSIBILITIES

- If the student's condition does not require immediate medical attention:
 - Make every effort to contact parents/guardians for transportation home.
 - Make the student as comfortable as possible.
 - Support and reassure the student until his or her parent/guardian can respond.
- If the student's condition requires medical attention or is life-threatening:
 - Stabilize the student using first aid techniques.
 - Request emergency transportation/call an ambulance or 911.
 - Make every effort to contact parents/guardians.
 - Continue nursing care until the emergency medical personnel arrive.
 - Contact parents/guardians and prepare follow-up plans as appropriate.

Note: It is not recommended that the nurse be responsible for transporting students because of the risk of liability and his or her inability to provide adequate nursing care to the ill or injured student while driving. The school nurse should review the school district's policies for transporting ill or injured students and determine with school officials what his or her role will be.

1.3.1-h Document Student Encounters

OBJECTIVE

To maintain accurate records of student encounters.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to evaluate and record observations and exchanges.
- Knowledge of confidentiality standards.

RESPONSIBILITIES

- Maintain accurate, concise, and complete nursing records of every student encounter.
- Utilize the school nurse documentation to record pertinent information on those students within the caseload, in accordance with school policy.
- Work with supervisor to evaluate caseload, with respect to activity and outcome.

Note: The method of documentation will conform to school policy regarding school nursing records. These records will be reviewed periodically as part of the performance appraisal process. These records are subject to the school policy relative to confidentiality and may not be accessed except under the conditions outlined within that policy. Aggregate information, without violating individual student confidentiality, may be made available to the local advisory board and others as indicated.



1.3.1-i Perform Health Assessments

OBJECTIVE

To assess and evaluate the total health and developmental status of the student through nursing assessment and the use of appropriate evaluative techniques.

GENERAL HEALTH APPRAISAL*Required Knowledge And Skills*

- Discrete nursing observation of physical status of the school-age child.
- Recognition of subtle health problems.

Responsibilities

- Obtain a physical and developmental assessment at the time of enrollment of the student in the nursing caseload.
- Establish and maintain adequate health records according to school and district policy.
- Conduct in-service education for teachers to assure more accurate referral (if appropriate).
- Conduct teacher-nurse or parent-nurse conferences as necessary during the school year.
- Conduct planned individual student health assessment (as appropriate).
- Develop and implement an individualized health care plan with student and parents/guardians (as appropriate).
- Report to the teacher and to other appropriate personnel findings and follow up on recommended educational adaptation.
- Periodically review health status of students with identified health problems and refer when necessary.

SPORTS PHYSICALS

With district approval, Public Health School Nurses may perform limited physical assessments for sports participants at the request of the schools using the following guidelines.

Required Knowledge and Skills

- A comfortable knowledge of his or her physical assessment skills.

Responsibilities

- Make school administrators aware of the nurse's diagnostic limitations.
- Obtain local advisory group approval.
- Obtain and use approved exam form with parent's/guardian's signature and health history prior to the exam.
- Refer all students with abnormal or questionable findings on the history or physical exam to a physician for further evaluation.

Note: Parents/guardians should have the option of having the exam done by another professional.



VISION SCREENING

Required Knowledge and Skills

- Knowledge of vision preservation techniques.
- Knowledge of vision appraisal techniques.

Responsibilities

- Assist teachers in the development of an eye health education unit to precede vision screening (if applicable).
- Conduct screening programs, record findings, and report to parents/guardians.
- Refer for appropriate care and follow up as indicated.
- Develop an individualized vision preservation plan with student and parent/guardian (as applicable).
- Report results of screening and school nurse's recommendations to teachers and other appropriate school personnel.
- Follow through on eye specialist's recommendations.
- Refer student to the program for the visually handicapped if indicated.
- Periodically review visual status of each student with identified problem and revise preservation plan as needed.

HEARING SCREENING

Required Knowledge and Skills

- Knowledge of hearing appraisal techniques.
- Knowledge of hearing preservation techniques.

Responsibilities

- Assist teachers to develop an ear health education unit to precede the auditory screening (if applicable).
- Conduct screening programs, report to parents/guardians, and record findings.
- Develop individualized hearing conservation plan with student and parent/guardian.
- Refer and follow-up (as indicated).
- Report results of screening and school nurse recommendations to teacher and other appropriate personnel.
- Follow through on medical recommendations.
- Refer student to the program for the aurally handicapped (if indicated).
- Periodically review the aural status of each individual student with an identified problem and revise hearing preservation plan.

EMOTIONAL AND MENTAL HEALTH ASSESSMENT

Required Knowledge and Skills

- Basic techniques of crisis intervention.
- Basic techniques for conflict management and coping skills.

Responsibilities

- Promote and assist appropriate school staff to provide in-service education for school personnel to assist them in recognizing early symptoms of emotional and mental health problems.
- Assist teachers in the development of mental health educational materials.
- Conduct individual student assessment and counseling as needed.
- Conduct parent/guardian conferences (as applicable).
- Collaborate with appropriate school and professional personnel to develop individualized mental health plan with student and parent/guardian.
- Refer to other appropriate personnel (as indicated).



- Participate in case conferences and periodically review the mental health care plan to provide for follow-up and adaptation of the educational program (as applicable).
- Provide monitoring and evaluation of treatment plans and collaborate with health care providers to optimize treatment.
- Assist students in developing problem-solving techniques, coping skills, and conflict management skills.

DENTAL/ORAL HEALTH SCREENING

Required Knowledge and Skills

- Dental/oral health appraisal techniques.
- Plaque control techniques.
- Principles of nutrition and dental health education.

Responsibilities

- Assist teachers to develop a dental health education unit to precede the screening program.
- Conduct dental and oral health inspections, counsel students, and report findings to parents/guardians.
- Refer for appropriate care and follow-up (as indicated).
- Plan dental health maintenance with student and parent/guardian.
- Report to teachers the findings and recommendations.
- Follow through on dentist's recommendations.
- Refer student to the other programs for oral health (if indicated).
- Periodically review dental status of each student with identified problem and revise preservation plan as needed.

ORTHOPEDIC AND POSTURE SCREENING

Required Knowledge and Skills

- Orthopedic screening techniques.
- Knowledge of musculoskeletal maturation and principles of good posture.

Responsibilities

- Conduct scoliosis and orthopedic screenings and rechecks.
- Report findings to parents/guardians with referral for appropriate care and follow-up (as indicated).
- Report results of screening and recommendations to teacher and other appropriate personnel.
- Follow through on medical recommendations.
- Refer student to the appropriate special program (if indicated).
- Periodically review orthopedic status of each student with an identified problem and revise the health maintenance plans as needed.

CARDIOVASCULAR APPRAISAL

Required Knowledge and Skills

- Blood pressure techniques.
- Recognition of cardiac problems.
- Principles of heart disease prevention.
- Recognition of risk factors.

Responsibilities

- Conduct in-service to assist teachers in the development of an educational program about the cardiovascular system.
- Conduct blood pressure screening programs.



- Confer with parents/guardians to obtain family cardiovascular history (if indicated).
- Refer for appropriate care and follow-up if indicated.
- Follow up on medical recommendations and report to teachers, parents/guardians, and appropriate school personnel (as indicated).
- Refer student to appropriate special education program (if indicated).
- Periodically review students with identified cardiovascular problems and revise health maintenance plans as needed.

GROWTH AND DEVELOPMENT APPRAISAL

Required Knowledge and Skills

- Comprehensive knowledge of growth and development.
- Ability to use height and weight grids accurately.
- Knowledge of body mass index (BMI).

Responsibilities

- Periodically assess student's height and weight accurately and record on grid.
- Obtain BMI (as appropriate).
- Confer with parent/guardian to obtain family developmental/medical history.
- Refer student for appropriate care and follow-up (as indicated).
- Follow-up on medical recommendations and report results to teachers, families, and other school personnel (as indicated).
- Periodically review health status and revise the health maintenance plan as needed.

1.3.1-j Provide Health Counseling

OBJECTIVE

- To assist students, parents/guardians, and teachers to obtain optimum wellness by stimulating behavior change through individual and group health counseling.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to evaluate health deviations for degree of significance.

RESPONSIBILITIES

- Identify students and families in need of health counseling sessions.
- Plan and schedule health counseling sessions.
- Conduct planned health counseling sessions as needed for both individuals and groups.
- Conduct spontaneous health counseling for both individuals and groups.
- Confer with appropriate school personnel and families (when indicated).
- Initiate referral to appropriate persons and agencies (when necessary).
- Periodically review progress of counselees.

Note: The school nurse shall not provide counseling and/or referral for abortion while performing their duties in the schools.



1.3.1-k Administer Medication

OBJECTIVE

To assure the school attendance of children who must use medication in the treatment of chronic disabilities, illness, or emergencies.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of effective use of medications and side effects.
- Knowledge of disease or disability prognosis.
- Ability to understand the range of coping mechanisms of students who must take medications more than once a day.
- Ability to properly administer, and record medication dosage in the schools.
- Ability to monitor adverse side effects.
- Ability to properly store drugs in schools.

RESPONSIBILITIES

- Provide consultation to the school district regarding the development of school policies and procedures regarding medicine administration.
- Enforce current medicine administration policies efficiently and effectively.
 - Written orders from a physician detailing the name of the drug, dosage, and time interval medication must be given.
 - Written permission from the parent/guardian of the student requesting that the school district comply with the physician's order must be given.
 - Medication must be brought to school in a container appropriately labeled by pharmacy or physician.
 - The initial dose must be administered by the parent/guardian, providing him or her with the opportunity to familiarize him- or herself with the medication, its side effects and benefits to the student.
 - Each medication given must be recorded on the school medication record that includes date, time and signature.
- Design, implement, and monitor procedures for safe administration and storage of all medications.
- Develop opportunities for communication with the student, parent/guardian, and physician regarding the efficiency of medication administered during school hours.
- Inform the appropriate school personnel of the potential benefits and side effects of drugs being administered.
- Observe, evaluate, and report to student's physician, with parental approval, the student's health status and reaction at school to the medication(s).
- Interpret to the physician those factors in the school that might affect the student's condition.
- Provide medications that may be needed in a temporary situation (example: Tylenol) and may only be administered by the school nurse with permission of the school district, the parent/guardian, and under a physician's order. All medications given must be recorded on a school medication record.
- Pursuant to state law, refuse to dispense birth control pills or contraceptive devices in the schools.

Note: Medication administration in the school setting is closely guided by interpretations published by the Mississippi State Board of Nursing. The school nurse should seek guidance regarding medication administration in this setting, especially with regard to potential interaction with non-licensed personnel in the school setting. To obtain more information on medication from the Board of Nursing, visit www.msbn.state.ms.us.



1.3.1-l Identify And Manage Chronic Health Problems, (Diabetes, Epilepsy, Asthma, Nephritis, Cancer, Amputee, etc.)

OBJECTIVE

- To assist students, parents/guardians, and teachers in adapting to student's chronic health problems.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to plan and implement effective case finding procedures.
- Ability to assess the degree of significance of the health problem to student's educational progress.
- Ability to assess drug reactions and side effects.

RESPONSIBILITIES

- Identify students with chronic health problems.
- Assess the degree of significance of the health problem on students' educational progress.
- Obtain current recommendations from the student's medical provider.
- Design and implement individualized and prescriptive health maintenance plan for the student.
- Conduct teacher-school nurse conferences regarding students with specific health problems to include:
 - Nature of health problem.
 - Signs and symptoms of impending emergency.
 - Recommended classroom management.
 - Scholastic achievement.
- Monitor student progress and modify health maintenance plan (if indicated).
- Observe, evaluate and report to student's physician, with parental approval, the student's health status and reaction at school to drugs or treatment being prescribed by the physician. Interpret to the physician those factors in the school that might affect the student's condition.
- Provide parental education and staff development programs regarding specific chronic conditions.

1.3.1-m Recognize And Support Abused Adolescents (i.e. Physical, Sexual, and Psychological Abuse and Neglect)

OBJECTIVE

To aid students suffering from physical, sexual, or psychological abuse and neglect.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of physical and social indicators of child abuse.
- Nursing observation and appraisal techniques for suspected abused children.
- Knowledge of and ability to interpret the medical/legal aspects of child abuse including agency reporting procedure.

RESPONSIBILITIES

- Identify students suspected of being abused.
- Observe and record location, type, and extent of injuries.
- Interview and counsel with student.
- Report to the Department of Human Services according to school policy and state law.
- Collaborate with appropriate school personnel (as indicated).
- Write comprehensive, objective, anecdotal record.
- Conduct appropriate follow-up activities.
- Periodically review status of student.



- Communicate with participating agencies.
- Refer student to appropriate community resources.
- Continue counseling student.
- Conduct in-service for school personnel as needed.

1.3.1-n Identify And Manage Substance Abusers

OBJECTIVE

To recognize students who are using illegal drugs or students who are consuming/abusing alcohol and/or nicotine products.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of symptoms of substance abuse.
- Ability to accept substance abuse as a medical problem and the substance abuser as a person who needs help.
- Ability to assess the severity of a substance abuse episode and to act appropriately.

RESPONSIBILITIES

- Identify persons who may be drug, narcotic, nicotine, and/or alcohol abusers.
- Administer first aid (as indicated).
- Secure emergency care as needed.
- Evaluate the student's behavior and rule out disability:
- Check health record for significant history.
- Counsel student regarding health status and behavior.
- Confer with student's teachers regarding recent classroom behavior.
- Confer with parents/guardians regarding current health status and home behavior (as indicated).
- Confer with family physician (if necessary).
- If above evaluation indicates that the student is under the influence of a harmful substance, follow school policy for referral to appropriate resource.
- Stimulate and participate in community programs designed to diminish substance abuse.

1.3.1-o Assess And Facilitate Special Education Needs

Note: As stated in P.L. 94-142, Education of All Handicapped Children's Act of 1975, "handicapped children" means those who are mentally retarded, hearing impaired, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, have other health impairments, are deaf-blind, multi-handicapped, or have specific learning disabilities, who because of those impairments need special education and related services.

OBJECTIVES

- To assist in the appropriate placement of students with exceptional needs.
- To assist in the development of the Individual Education Plan.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to assess the degree of significance of the handicap on student's educational progress.
- Techniques of educating students with exceptional needs.
- Knowledge of criteria for differential grouping of students with exceptional needs.
- Ability to understand and respect the range of coping mechanisms of students with exceptional needs.

RESPONSIBILITIES

- Identify candidates for placement in special programs.
- Conduct the initial health evaluation, including classroom observation, a parent/guardian conference to obtain in-depth developmental, health history, and home environment assessment.



- Ascertain that any pertinent medical information is available for the team meeting and serve as student advocate.
- Conduct or arrange for a physical assessment/examination (if indicated).
- Develop individualized health and emergency care plans (as appropriate).
- Periodically confer with student, parent/guardian, and faculty.
-
-
- Assist parent/guardian and student to use appropriate community resources.
- Follow up on medical recommendations and report to teachers and appropriate personnel.
- Provide teacher in-service regarding health plan of students (if indicated).
- Provide nursing treatment and specialized health procedures appropriate to the student's disability to allow the student to remain in the least restrictive environment.
- Provide support to teachers and parents/guardians of students who have specialized health care needs.

1.3.1-p Monitor And Assist Pregnant Students

OBJECTIVE

To protect the well-being of pregnant students and their infants.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of the needs of pregnant minors.
- Ability to teach prenatal and postnatal care and effective parenting skills.

RESPONSIBILITIES

- Counsel adolescent female who thinks she is pregnant.
- Refer potentially pregnant or pregnant student for medical diagnosis and recommendations.
- Counsel pregnant adolescent regarding available options for care and refer as necessary.
- Counsel adolescent to seek support of her family.
- Develop individual nursing plan.
- Confer with appropriate school personnel regarding continuation of education.
- Provide counseling program for each pregnant adolescent, including completion of her education.
- Assist in planning and implementing a prenatal, postnatal, infant care, parenting skills, and health education program.
- Coordinate efforts of community agencies to meet the needs of the pregnant adolescent.

1.3.2 OBLIGATION TO COMMUNITY AGENCIES AND MEDICAL CARE FACILITIES

OBJECTIVE

To assure that the health needs of the school population are considered in communities' overall health planning.

REQUIRED KNOWLEDGE AND SKILLS

- Ability to serve as liaison to local, state, and national health resources.

RESPONSIBILITIES

- Know the referral procedures for community agencies for effective use of their resources and facilities.
- Maintain current information regarding resources and referral procedures of community facilities.
- Work with community agencies to develop new health resources as needed.
- Facilitate communication between the medical community and the school.



- Cooperate with community agencies in the planning and implementation of community health and welfare programs.

1.3.3 OBLIGATION TO PROFESSION OF SCHOOL NURSING

1.3.3-a Conduct Evaluation of the School Nursing Program

OBJECTIVE

To improve the school nursing services program.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of research methods.
- Knowledge of optimum school nurse services program.

RESPONSIBILITIES

- Conduct studies as needed to evaluate the school nurse services program and apply findings.
- Continually review published research and apply findings (if appropriate).
- Plan and implement appropriate studies to determine staff, student, and parent perception of the school nurse services program.
- Participate in other pertinent research projects with administrative approval.
- Incorporate advisory group recommendations into practice (as indicated).
- Conduct self-evaluation (as indicated).
- Compile and analyze school health records, reports, and statistical information in order to evaluate and improve program.

1.3.3-b Develop Professional Skills

OBJECTIVE

To contribute to the improvement of the profession and maintain personal professional competence.

REQUIRED KNOWLEDGE AND SKILLS

- Knowledge of changes in medical, nursing, and educational theory and practice.
- Knowledge of changes in school nursing practice and preparation.
- Knowledge of professional and school nursing organizations.

RESPONSIBILITIES

- Comply with medical, nursing and educational ethics.
- Maintain familiarity with the current professional literature (medical, nursing, and educational).
- Participate in continuing education activities: Join and actively participate in professional organizations.
- Contribute to the profession through professional journal articles, speaking at professional meetings, and/or serving on professional committees.



1.4 ADMINISTRATIVE GUIDELINES FOR PERFORMANCE EVALUATION

The following categories of activities should guide the school administration in assessing the performance of the school nurse.

- The school nurse evaluates the quality and effectiveness of her practice and makes changes accordingly.
- The school nurse participates in evaluating her performance by referencing the *Mississippi Nurse Practice Act*, *Scope and Standards of Clinical Nursing Practice*, *Scope and Standards of School Nursing Practice*, school policies/procedures, and other appropriate guidelines.
- The school nurse maintains knowledge of the school health area of practice.
- The school nurse interacts with and contributes to the development of school personnel as colleagues.
- The school nurse's decisions and actions on behalf of the students are determined in an ethical manner.
- The school nurse works with students, families, other school staff, the community, and other health care providers in providing care to the students.
- The school nurse incorporates research findings to improve her nursing practice.
- The school nurse considers factors related to safety, effectiveness, and cost when planning and providing care to the students.
- The school nurse uses effective written, verbal, and non-verbal communication skills.
- The school nurse manages school health services.
- The school nurse assists students, families, school staff, and the community to achieve optimal levels of wellness through appropriately designed and delivered health education.

Note: It is strongly recommended that the school nurse secure a copy of the full document *Scope and Standards of Professional School Nursing Practice* (2005) from American Nurses Publishing, 600 Maryland Avenue SW, Suite 100W, Washington, DC, or from www.nasn.org.



2

SELECTED NURSING
PROCEDURES

2.1 Introduction

This section contains descriptions of selected school nursing procedures that may be performed in the school setting. Not all school nurses will perform all procedures.

The procedures performed should relate to the school nurse's job description and description of the school health model chosen for the school.

Questions about additional school nursing procedures to be performed in Mississippi schools should be directed to the Mississippi State Board of Nursing or the State Department of Education.

Additional information regarding school nursing procedures can also be obtained at www.nasn.org or from a current school nursing or child health nursing textbook. The school nurse should be familiar with any nursing procedure before she performs said procedure on any child in the school setting.

RECOMMENDED TEXTBOOKS:

- Ashwill and Droske. (1997). *Nursing Care of Children*. W. B. Saunders.
- Bickley, L. (2000). *Bates Pocket Guide to Physical Examination and History Taking*. Lippincott.
- Deglin and Vallerand. (2003). *Davis' Drug Guide for Nurses*. F. A. Davis Company.
- Hootman, Janis. (2004). *Quality Nursing Interventions in the School Setting*. NASN.
- Jarvis, C. (2000). *Physical Examination and Health Assessment*. W. B. Saunders.
- Pillitteri, A. (1999). *Child Health Nursing*. Lippincott.
- Smith and Duell. (2000). *Clinical Nursing Skills*. 5th ed. Appleton and Lange.



2.2 Taking Anthropometric Measurements FOR AGES 2 YEARS - ADULT

PURPOSE

- To measure children who weigh more than the pediatric beam scale and can stand without assistance for height.
- To measure adults.
- To obtain the Body Mass Index (BMI) and to provide an index in the total physical assessment and an indicator of disease or abnormal process.

EQUIPMENT NEEDED

- Measuring tape made from non-stretchable material attached to a vertical, flat surface (wall), marked in 1/8 inch or 1 mm (0.1 cm) increments.
- Moveable right angle headpiece.
- Double balance beam scale calibrated in pounds or kilograms. (Do not use the measuring rod on the adult scale for heights.)
- BMI: Measurement tools specific for BMI. For children, calculation can be made using the table of values for selected heights and weights. For adults, calculation can be made using the BMI table.

PROCEDURE

Measuring Height

- Have student remove shoes and outer clothing.
- Have student stand with feet slightly apart, with the heels, the buttocks and the shoulders touching the wall or surface of the measuring tape.
- Have student look straight ahead.
- Lower the moveable headboard until it firmly touches the crown of the head. Do not allow the hairstyle to prevent the board from touching the crown of the head.
- Hold the right angle headpiece steady and have the student move out from under it.
- Read measurement from the bottom of the moveable block to the nearest 1/8 inch. Record immediately.
- Repeat the procedure until two measurements agree within 1/4 inch.
- Record student's height on appropriate age/sex growth chart by locating age on horizontal plane and height on vertical plane and placing a dot at the intersection of age/height.

Measuring Weight

- Have student remove shoes and heavy outer clothing.
- Zero balance the scale.
- Have student step onto the center of scale.
- Slide large weight (lb/kg.) along calibration to closest but below estimated weight and the weight fits into the proper groove.
- Slide small weight along calibration until scale is balanced.
- Read the measurement to the nearest 1/4 pound. Record immediately.
- Have student step off the scale and zero balance the scale.
- Record student's weight on appropriate age/sex growth chart by locating age on horizontal plane and height on vertical plane and placing a dot at the intersection of age/weight. Record ratio of length to weight by locating length on horizontal plane and weight on vertical plane and placing a dot at the intersection of length/weight.

Calculating Body Mass Index (BMI)

- Convert fractions of pounds or fractions of inches to decimal values.
- Example: 58 1/2 pounds = 58.5 pounds; 25 1/4 inches = 25.25 inches).
- Use a calculator to compute the following formula:



$(\text{weight in pounds} \times 703) / \text{height in inches} = \text{BMI}$

- Use BMI charts and be sure to use the appropriate table and interpretation as described:

Children: Locate the height measurement on the vertical axis and the weight measurement on the horizontal axis of the table. The intersection of height and weight is the BMI.

Adults: Locate the height on the vertical axis, scanning across that row, find the number closest to the weight. At the top of that column is the BMI.

2.3 Conducting a Physical Examination

PURPOSE

To assess the overall health condition of the student.

PROCEDURE

The survey or general inspection begins with those observations made of the student when he/she enters the room and continues throughout the interview. It is the overall impression of the student's general state of health and outstanding characteristics.

The survey proceeds in a cephalocaudal direction and should include the following: apparent state of health, signs of distress, skin color, body build and size, weight, posture, motor activity, gait, dress, grooming, personal hygiene, odors, facial expression, mood and relationship to persons and things around him or her, speech, state of awareness, and consciousness.

INTERPRET VITAL SIGNS

- Body temperature.
- Pulse.
 - Radial pulse rate-apical if indicated and record pulse deficit.
- Note: Always take apical pulse rates on children.
- Respiration.
 - Rate.
 - Use of accessory muscles.
- Blood pressure.

Notes: Document if student is sitting, standing, or lying down. Extremity used for measurement.

MEASURE SOMATIC GROWTH

- Height.
- Weight.

Note: Use physical growth charts when appropriate. Compare height and weight to the norm given.

Note: The current weight of pregnant students should be compared to measurements taken pre-pregnancy and at the last visit to the school nurse to calculate the total weight gain during the pregnancy.

INSPECT INTEGUMENT

- Skin - color, temperature, texture, turgor, mobility and elasticity, moisture and lubrication, lesions, edema, bruises, striae, discoloration.
- Hair - color, texture, amount, distribution, parasites.
- Nails - color, texture, thickness, lesions.
- Mucous membranes - color, texture, hydration, lesions.



EXAMINE HEAD

- General size and shape of skull - deformities, lumps, tenderness; infants – fontanel.
- Condition of scalp – scaliness, lumps, lesions.
- Face - symmetry, involuntary movements, edema, masses.

EXAMINE EYES

- Visual acuity using appropriate vision chart.
- Pediatrics - Use flashlight and have student follow light.
- Eyebrows - quantity, distribution, scaliness.
- Eyelids - edema, color, lesions, condition of eyelashes.
 - Conjunctiva of lower lid - color.
- Sclera - color.
- Pupils - size, shape, equality, reaction to light.

EXAMINE EARS

- Auricle - deformities, lumps, skin lesions.
- External ear canal - ear pain, discharge, inflammations.
- Auditory acuity screening using the audiometer.
- Placement of ears - normally the ear joins the scalp on or above the extension of a line, drawn from the inner and outer canthus of the eye to the top of ear.
- Infant - Ring bell or shake rattle 12 inches from the ear, observe for increased sucking, blinking or startling.

EXAMINE NOSE AND SINUSES

- Nose - deformity, asymmetry, inflammation.
- Nasal mucosa - color, swelling, exudate, bleeding.

EXAMINE MOUTH AND PHARYNX

- Lips - color, moisture, lumps, ulcers, cracking.
- Buccal mucosa - color, pigmentation, ulcers, nodules.
- Gums - inflammation, swelling, bleeding, retraction, discoloration, lesions.
- Teeth - number, loose or carious teeth, abnormalities in position or shape of teeth, state of repair, permanent or deciduous.
- Roof of mouth - color, lesions, continuity.
- Tongue - dorsum of tongue - color and papillae, lesions. Inspect sides under surface of tongue together with floor of mouth for white or reddened areas, nodules, ulcerations.

EXAMINE NECK

- Symmetry, masses, scars.
- Inspect and palpate the trachea for deviation from the midline.

EXAMINE THORAX

- Inspect for deformities of thorax, retraction or bulging of interspaces on respiration.
- Palpate the thorax for tenderness, masses.

EXAMINE BREASTS AND AXILLA

- Breasts - size, symmetry, contour, color, edema, dimpling, venous pattern, mass.
- Nipples - size, shape, inversion, rashes, ulceration, discharge, direction in which they point.
- Axilla - rash, inflammation, unusual pigmentation.

EXAMINE HEART AND PERIPHERAL VASCULATURE

- Peripheral pulses - volume: weak, full, strong.
 - carotid: right and left
 - brachial: right and left



- radial: right and left
- femoral: right and left (especially important in infants)
- popliteal: right and left
- dorsalis pedis: right and left
- posterior tibial: right and left
- Veins of lower extremities - distended, tortuous, non-distended.
- Calves - tenderness, inflammation, edema, Homan's Sign.

EXAMINE ABDOMEN

- Abdomen - scars, striae, dilated veins, rashes, lesions, distention, contour, symmetry, masses, observable peristalsis, and pulsations.
- Scaphoid abdomen - newborn.
- Umbilicus - contour, location, inflammation.
- Estimate abdominal muscle tone.
- Obstetrical data.
 - Fetal heart tone and rate, location.
 - Current fundal height.
 - Compare fundal height to gestational age and note any abnormality.
 - Lie/presentation of fetus

EXAMINE GENITALIA

- Male
 - Inspect skin, foreskin, glands, and urethral meatus for ulcers, scars, warts, etc.
 - Note if foreskin retracts; circumcised, uncircumcised.
 - Note the location of the urethral meatus and any discharge.
 - Inspect the scrotum for nodules, inflammation, or ulcers.
 - Infants - descended testicles.
- Female
 - Inspect labia minora, clitoris, urethral orifice, and vaginal opening for inflammation, ulceration, discharge, swelling, nodules, warts, etc.
 - Inspect vagina, cervix, uterus, lesions - shape, color, number, distribution, location
 - Note discharge - odor, color.

EXAMINE RECTAL ANUS

- Inspect the anal region for skin lesions, scars, inflammation, fissures, external hemorrhoids, tumors, patency.

EXAMINE MUSCULOSKELETON

- Symmetrical body parts.
- Evaluate student's ability to carry out activities of daily living: walk, stand, sit, sit up, rise from a sitting position, lie down, climb, pinch, grasp, turn a page, lean over, comb hair, brush teeth, feed himself, bathe and dress himself, turn over in bed, bathe perineum.
- Swelling of joints.
- Obstetrical data from chart.

CONDUCT NEUROLOGICAL EXAM

- Movement: weakness, paralysis, loss of coordination.
- Sensation: increased or decreased cutaneous sensation to touch, heat and cold, pain.
- Speech: verbal expression, aphasia, unusual speech patterns, e.g., lisping, stuttering.
- Newborn reflexes: tonic neck, moro, grasp, rooting, sucking, vertical suspension positioning, placing response (dance reflex).



ASSESS MENTAL STATUS:

- State of consciousness.
 - Alert and quick to respond to stimuli.
 - Drowsy and slow to respond to stimuli.
 - Semi-conscious and difficult to arouse.
 - Comatose and unable to arouse.
- Orientation to time, place, and person; to situation and to self.
- Attention span.
- Memory - recent, remote.
- Follows simple directions.
- Anxiety - signs and symptoms.

2.4 Conducting Hearing & Vision Screening

A public agency may conduct hearing and vision screening without obtaining written parental permission if there is an agency policy stating that any student who has not been successful in the regular education program may be screened for vision and hearing as a means of determining whether hearing and/or vision problems are the cause of the child's lack of success in the regular program. All hearing and vision screening must be conducted according to guidelines set forth by the Mississippi Department of Education.

2.4.1 VISION SCREENING

GENERAL GUIDELINES

Form DI-SE-F55 (See Appendix D), Part I, or a similar form including the same information must be used to record the results of the vision screening(s). All children will be screened using the right eye, left eye and both eyes. If the child wears glasses, then the glasses should be worn during screening. Preschool through fourth grade children may be screened with the Hand Chart, Snellen "E" Chart or other appropriate eye chart for near-sightedness. For children in grades 5 – 12, near-sightedness may be screened with the Snellen "E" or Alphabet Chart. To screen far-sightedness on children ages 3 – 5, a near vision chart is recommended; for children ages 6 – 20, far-sightedness may be screened using the +2.00 lens.

2.4.1-a Visual Acuity Test

PURPOSE

To determine decreased visual acuity and make appropriate referral for evaluation when indicated.

EQUIPMENT NEEDED

- Snellen 20-Foot Wall Chart or other appropriate standardized chart (E chart or Bernell symbol chart).
- Disposable Occluder.
- Titmus Machine (follow instructions with machine).

PROCEDURE

- Have student stand or sit at the 20-foot mark exactly, facing the chart.
- If student wears glasses or contact lens, screen only with glasses or contact lens in place. (If student has glasses and is not wearing them, screening should be scheduled for another day with glasses.)
- Check young student to be sure he/she understands how to respond. Take student



up close to the chart if necessary.

- Begin with the line above the critical line (referral line) for student's age, i.e., for 3-year-olds show symbols on the 50-foot line, for those ages 4 and over, start with the 40-foot line.
- Test both eyes first on a few symbols to be sure that student can be screened. Chart attendant will expose first uncovered line of symbols with window card and use pointer to point from below to each symbol student is to read. With E chart, student will respond by pointing with hand or arm the direction in which the E points. With the letter chart, student will name the letters.
- Each eye can now be tested separately; right eye first, then left eye. A standardized routing avoids confusion and facilitates recording. Test right eye first according to the following procedures:
 - Put the occluder over the left eye. Instruct student to keep both eyes open.
 - Starting with first uncovered line, student is asked to identify symbols in order, moving across the line from left to right.
 - To pass a line, the student must be able to read (correctly identify) one more than half the symbols on the line. This is usually considered evidence that student sees the line satisfactorily.
 - If first line is read correctly, proceed to the next smaller line and change direction in which symbols are presented (i.e., move from right to left across the line). Continue presenting each smaller line of symbols through the 20-foot line, as long as the student can identify one more than half the symbols on the line. Change direction with each line presented (e.g., follow a "snake" pattern).

INTERPRETATION

To pass the visual acuity test the following recommended criteria must be satisfied:

- 3-year-olds
 - The ability to identify correctly one more than half the symbols on the 40-foot line on the chart at a distance of 20 feet, i.e. vision of 20/40 or better in each eye.
 - The student does not have a two-line difference in visual acuity between the eyes in the passing range, e.g. 20/20 in one eye and 20/40 in the other eye.
- All other ages
 - The ability to identify correctly one more than half the symbols on the 30-foot line at a distance of 20 feet.
 - Follow-up to assure the appointment was met and recommended treatment was obtained. Appropriate documentation must be placed in the medical record.

Note: Students passing this test using the above criteria should be administered the plus lens test.

Criteria for failing vision screening:

- Worse than 20/40 using both eyes (near-sightedness); or
- Can read the 20/20 line with the +2.00 lens (far-sightedness);



Other instruments may be used, but the scores must be stated in Snellen equivalents. It is strongly recommended that no vision testing machine be used for screening children before the fifth grade.

2.4.1-b Perform Plus Lens Test

PURPOSE

To determine the possibility of latent hyperopia (farsightedness).

Note: The test should be administered only to those students who pass the visual acuity test.

EQUIPMENT NEEDED

- Snellen chart or other standardized chart
- Hyperopia Screening Flippers (plus lens)

PROCEDURE

- The student should be tested on the smallest line of letters or symbols on the Snellen Chart which he/she was able to read correctly with either eye.
- The plus lens with occluder is placed in front of the student's eyes. He/she is again asked to read the smallest line of letters or symbols on the Snellen Chart which was previously read correctly during the visual acuity test.
- This procedure is performed with one eye, then with the other. Changing eyes is accomplished by rotating the plus lens along its horizontal axis.
- The student whose eyes are normal, or emmetropic, will not be able to read the smallest line previously read when the plus lens is placed in front of his/her eyes. (This is interpreted as passing the plus lens test.)
- The ability of the student to read the 30-foot line or lower line with both eyes while looking through these lenses indicates the need for referral. (This is interpreted as failing the plus lens test.)

2.4.2 HEARING SCREENING

GENERAL GUIDELINES

Form DI-SE-F55 (See Appendix D), Part I or a similar form including the same information must be used to record the results of the hearing screening(s). The suggested sequence is as outlined:

Administer an individual screening test. Screen 500, 1000, 2000, 3000 and 4000 Hz at a hearing level of 25 dB (500 Hz may be screened at 30 dB). The clinician may screen at 6000 and 8000 Hz at his or her discretion. A child must be rescheduled for a second individual sweep test within one week if failure to respond at the recommended screening levels at any frequency in either ear is noted. Procedures and criteria for the second sweep test are the same as those of the first.

Note: If a child with a severe disability cannot be conditioned to respond to a hearing screening and referral to a specialist would be inappropriate, then a quantitative description of the child's hearing must be completed. Form DI-SE-F55, Part II in Attachment I must be completed or a similar form containing the same type of information by an individual who works with the child or who has knowledge of the child's hearing.

PURPOSE

To determine if student can hear within normal range and to make appropriate referral for further evaluation if indicated.



2.4.2-a Screen with AudioScope 3

The AudioScope 3 is a hand held audiometric screening device. It can provide screening at the speech frequencies of 1000, 2000, 4000 Hz at a fixed decibel level. Choices of decibel levels include 20 dB HL, 25 dB HL, and 40 dB HL. Prior to the screening a practice tone should be delivered at 1000 Hz and at 40dB HL. Screening should be completed using the same settings as outlined for the Pure Tone Audiometer.

EQUIPMENT NEEDED

- AudioScope 3

PROCEDURE

- Before starting assure the lens is centered in the AudioScope 3 instrument.
- Select the largest size AudioSpect ear speculum that can be inserted into the ear canal without causing pain. Speculums are provided with the instrument.
- Turn on by sliding the selection switch to 40 dB HL. *
- With the thumb and index finger grasp the auricle. For young children, straighten the ear canal by pulling the auricle downward. For older children and adults, straighten the ear canal by pulling the auricle upward and backward.
- Gently insert the speculum tip into the ear canal. Position the tip so that the tympanic membrane or a portion of it can be visualized.
- Depress the start button to deliver the practice tone. After the practice tone, switch to 25 dB to begin the screening.
- Observe each tone indicator and the student's response.
- Repeat steps 4 through 7 on the opposite ear.
- When completed, turn the instrument off by sliding the switch down.
- Document results on the audiometric screening form.

* Should the yellow Lo Batt indicator illuminate, see the recharging instructions in the user's manual.

2.4.2-b Screen with Audiometer

EQUIPMENT

- Audiometer

PROCEDURE

The procedure as described here is a basic audiometric screening procedure. However, it may be altered based on the selection of audiometric screening equipment. The school nurse should become familiar with the guidelines for the equipment used in his or her school setting.

Screening should be completed in sequence at 500, 1000, 2000, 4000 Hz. 500Hz can be screened at 30 dB, but all other levels are to be screened at 25 dB.

Criteria for failure is the failure to respond to any one frequency in either ear at the recommended screening level. A child must be rescheduled for a second individual sweepstest within one week. Procedures and criteria for the second sweepstest are the same as those of the first.

- Instruct the student that he/she will hear a loud tone (or beep) and then some low or soft tones (or beeps). Instruct the student to respond every time a tone is heard by pointing to the ear or raising the hand. Remind the student to put his/her hand down after hearing the tone and listen for the next sound.
- With the student seated facing away from the examiner, the earphones should be placed on the ears appropriately. Hair should be pushed back and glasses removed



so that the earphones adequately cover the student's ears.

- A "practice tone" should be given above the normal screening level. Set the frequency dial at 1000 Hz and the intensity dial at 40 dB. The practice tone above the normal screening level allows for quick and easy identification of the tone during the screening test.
- Set the frequency dial at 1000 Hz and the intensity dial at 25 dB. Present the tones in sequence for one to two seconds.
- Present the tone at 500 Hz. (May test at 30 dB if necessary.)
- Switch the tone at 1000 Hz and present the tone.
- Switch to 2000 Hz and present the tone.
- Switch to 4000 Hz and present the tone.
- Move the selector switch to the left ear and repeat the process.

2.4.2-c Interpreting Hearing Screenings

Failure is one miss at any frequency in either ear.

Those students who fail screening should be rescreened within one week. If a student fails rescreening, refer.

Referral:

- Any student failing the audiometric screening test should be referred for further evaluation. If there is an otological problem found during examination, referral should be made to the family physician or ENT specialist.
- Any evidence of ototoxicity in patients on TB drugs should be documented and reported to the patient's physician.

2.5 Conducting Developmental Screening

All developmental screenings for children ages 6-12 are conducted with the Denver Developmental Assessment Tool.

GENERAL GUIDELINES

It is recommended that the registered nurse or a paraprofessional do the developmental appraisal as a part of a total health assessment. The registered nurse remains responsible for the supervision of the administration of the developmental appraisal by the paraprofessional, the interpretation of the results, and the counseling of the parents/guardians in relation to the results.

If a developmental test requiring the cooperation of the child is used, data should be gathered before any procedure is done that might cause a breach in rapport or discomfort, e.g., immunizations, collection of blood, etc. If the child is less than 6 years of age, the recommended procedure for doing developmental appraisal is the administration of the development screening tool as revised for the younger child.

PURPOSE

- To determine if a student over 6 years of age is growing or developing within a normative pattern in the areas of gross motor, fine motor, personal, social, and language behavior.
- To identify students who have significant deviations from the norm.
- To provide clues for identifying the need for intervention and/or supportive/advisory counseling for parents/guardians, caretakers, and/or children and youth.

2.5.1 USING THE DENVER TEST

This section describes the Denver development test. Denver testing kits may be ordered from Denver Developmental Materials, Inc., P.O. Box 6919, Denver, CO, 80206-0919, phone (303) 355-4729. Other appropriate developmental tests may be used, but the school nurse should be familiar with the type of test chosen. In schools with the Cool Kids Program (formerly ESPDT services), the type of developmental test used should be approved by the Division of Medicaid.

PURPOSE

The Denver test is a device for detecting developmental delays in infancy and the preschool years, and has been standardized on a large cross-section of the Denver child population.

The test is administered with ease and speed and lends itself to serial evaluations on the same test sheet.

It is not a diagnostic instrument nor an intelligence test. It is a screening device to alert health professionals to the possibility of developmental delays.

EQUIPMENT NEEDED

- Denver Kit (typical contents),
 - Red yarn pom-pom (approximately 4" diameter)
 - Raisins
 - Rattle with narrow handle
 - 10 one-inch square colored wooden blocks
 - Small, clear glass bottle with a 5/8 inch opening
 - Small bell
 - Tennis ball
 - Red pencil
 - Small plastic doll with feeding bottle
 - Plastic cup with handle
 - Blank paper
- Denver manual appropriate for the test.
- Denver screening test forms appropriate for the test.
- The developmental assessment form approved by the Division of Medicaid may be used to perform a developmental assessment, using the general guidelines from the Denver procedure for considerations and referral.

PREPARATIONS

The parents/guardians should be told that this is a developmental screening device to obtain an estimate of the child's level of development and that it is not expected that the child be able to perform each of the test items.

This test relies on observations of what the child can do and on reports by a parents/guardians who knows the child. Direct observation should be used whenever possible.

Since the test requires active participation by the child, every effort should be made to put the child at ease. This should be done in such a way that he/she can comfortably reach the test materials on the table. The test should be administered before any frightening or painful procedures. A child will often withdraw if the examiner rushes demands upon the child.

One may start by laying out one or two test materials in front of the child while asking



the parents/guardians questions from the personal-social sector. It is best to administer the first few test items well below the child's age level in order to assure him an initial successful experience.

To avoid distractions it is best to remove all test materials from the table except the one that is being administered.

PROCEDURE

- Draw a vertical line on the examination sheet through the four sectors (Personal-Social, Fine Motor-Adaptive, Language and Gross Motor) to represent the child's chronological age. Place the date of the examination at the top of the age line. For premature children, subtract the months' prematurity from the child's age to obtain the adjusted age for prematurity. For children born more than two weeks before the expected date of delivery and who are less than two years, the calculated age must be adjusted. No age adjustment is necessary for children more than 2 years of age or for children born later than expected.
- The number of items to be given will vary with the age of the child being tested. All items through which the age line passes should be administered as well as at least three items nearest to and totally to the left of the age line. If child is unable to perform any of the previous items, administer additional items to the left of the age line in the appropriate sectors until child passes three items. Make certain the child has several passes to the left of any failure. A child should be given three opportunities to pass an item.
- In the event that a child refused to do some of the items requested by the examiner, it is suggested that the parent/guardian administer the item, provided she does so in the prescribed manner.
- If a child passes an item, a large letter "P" is written on the bar at the 50% passing point. "F" designates a failure, and "R" designates a refusal. "N.O." designates no opportunity; the child has not had the chance to perform the item, due to restrictions from the caregiver or other reasons. "N.O." may only be used on "report" items.
- Complete the test behavior section. Note how the child adjusted to the examination, that is, his/her cooperation, attention span, self-confidence, and how he/she related to his/her parent/guardian, the examiner and the test materials.
- Ask the parent/guardian if the child's performance was typical of his or her performance at other times.
- To retest the child on the same form, use a different color pencil for the scoring and age line. (A single test form may be used for subsequent testing.)
- Instructions for administering footnoted items are on the back of the test form.

INTERPRETATION

A Delay item results when student refuses an item that falls completely to the left of the age line. A delayed item is indicated by coloring in the right end of the bar. See appropriate *Denver Instruction Manual* for other scoring criteria. The Denver test is used to identify the child whose development appears to be delayed in comparison to the development of other children.

A Caution is scored when a child fails or refuses an item on which the age line falls on or between the 75th and 90th percentile. A caution is indicated on the test form by writing a C just to the right of the bar.



The Denver test is generally interpreted as follows:

Normal

- No Delays and a maximum of 1 Caution.
- Conduct routine re-screening at next well-child visit.

Suspect

- 2 or more Cautions and one or more delays.
- Re-screen in 1-2 weeks to rule out temporary factors such as fatigue, fear or illness.

Unstable:

- Refusal scores on one or more items to the left of the age line or on more than one item intersected by the age line in the 75%-90% area.
- Re-screen in 1-3 weeks.

REFERRAL CRITERIA

If upon re-screening the test result is again Suspect or Unstable, the determination to refer for further evaluation with more diagnostic studies through a developmental evaluation clinic should be made based on the clinical judgment of the nurse using the following criteria:

- Profile of test results (which items are Cautions and Delays).
- Number of Cautions and Delays.
- Rate of past development.
- Other clinical considerations (clinical history, evaluations, etc.).
- Availability of referral resources.

If severe developmental delays are noted, an immediate referral should be made.

2.6 Conducting Scoliosis Screening

PURPOSE

As many as 4% of children ages 10-14 years of age have been found to have some signs of scoliosis, but in most cases, the curvature is slight and does not progress to the point where treatment is needed.

Early detection of scoliosis can prevent complications such as impairment of range of motion and problems with endurance.

Scoliosis may be functional (due to poor posture) or structural (due to deformities of the vertebral column).

EQUIPMENT NEEDED

- Private, well-lit screening area
- Separate area for boys and girls that will ensure privacy

PROCEDURE

- The student should be directed to stand erect but relaxed, facing the screener. Feet should be together, arms relaxed at sides, weight evenly distributed on both feet.
- Check the student for elevated shoulders, unequal space between arm and side and uneven waist creases.
- Instruct the student to bend at the waist, hands together, head tucked in.
- Examine the student for asymmetry of the rib cage or upper back, rib hump present in the upper or lower back, or a curve in the spinous process alignment.
- Instruct the student to turn to the side.



- Observe for accentuated round back, accentuated spinal hump, or curvature of the spinous process.
- Record findings.
- Refer for further evaluation by family physician if any abnormalities are noted.

Note: Students with questionable findings should be re-screened in 4-6 months.

2.7 Providing For The Special Needs Child

There are many special needs children in the school setting in Mississippi. These children may need assistance with specialized procedures (e.g., catheter, feeding tube, tracheostomy care).

The school nurse should be advised that she should become very familiar with the procedures required by the individual child before attempting to assist with any of them.

Guidelines for performing the procedures may be individualized to the child's specific needs, so the school nurse should consider the following references for guidance:

- Physician's orders.
- Parent's/guardian's communication regarding the procedure as typically handled in the home.
- A current nursing procedure textbook describing the procedure (see Section 2.1 for suggested texts.)
- Guidance from the School Nursing Association (www.nasn.org) and the Mississippi Board of Nursing.
- School district policies and procedures.

2.8 Administering Medication

This section provides guidelines for the school nurse whose major job responsibilities involve the administration of medications in the school setting. This material has been developed in consideration of the Registered Nurse's legal practice and standards of care. The school district may utilize these guidelines in the development of comprehensive school policies.

It is recognized that school policies and resources vary with regard to the provision of medications. These guidelines have been developed so that schools can use the sections that are appropriate to their individual setting.

The medication training manual can be found on the Mississippi Board of Nursing website at www.msbn.state.ms.us.

2.8.1 PROPERLY HANDLING MEDICATION

Documentation will occur on the medication record and/or other appropriate school health note.

Administration of medications may not be delegated to unlicensed personnel in accordance with the *Nurse Practice Law of Mississippi*. Teaching a parent, guardian, or other designated direct caregiver to give or monitor medication administration (under a clinician's order) does not constitute delegation.

The nurse is professionally accountable for:

- The teaching of usual side effects and other pertinent information.



- The evaluation of the caregiver's response.
- The documentation and reporting of the same. School specific situations that present questions regarding delegation should be directed to the Mississippi Board of Nursing.

Packing, labeling, and dispensing medications are the professional responsibility of the pharmacy and are not within the scope of practice for registered nurses. As previously noted, the responsibility of the nurse is the administration of medications.

Pharmacies provide medications in a labeled package. The nurse may write the name on the pre-fixed label. Medication that has been packaged and labeled by a pharmacy must not be altered or repackaged by the registered nurse. The label also must not be altered by the registered nurse.

School policies should include provisions for the administration of medications on school-sponsored trips. Inhalers and Epi-pens are examples of medications that should accompany students who have these *prn* medications ordered.

2.8.2 ADMINISTERING ASTHMA MEDICATION

The self-administration of asthma medication by students at school must follow Asthma Medication Law 41-79-31 as stated below:

The school board of each local public school district and the governing body of each private and parochial school or school district shall permit the self-administration of medications by a student if the student's parent/guardian:

- Provides written authorization for self-administration to the school, and
- Provides a written statement from the student's health care practitioner that the student has asthma and has been instructed in self-administration of asthma medications. The statement shall also contain the following information:
 - Name of and purpose of the medications.
 - Prescribed dosage.
 - Time or times the medications are to be regularly administered and under what additional special circumstances the medications are to be administered.
 - Length of time for which the medications are prescribed.

The statements required in subsection (1) of this section shall be kept on file in the office of the school nurse or school administrator.

The school district or the governing body of each private and parochial school or school district shall inform the parent/guardian of the student that the school and its employees and agents shall incur no liability as result of any injury sustained by a student from the self-administration of asthma medications. The parent/guardian of the student shall sign a statement acknowledging that the school shall incur no liability and the parent/guardian shall indemnify and hold harmless the school and its employees against claims relating to the self-administration of asthma medications.

The permission for self-administration of medications shall be effective for the school year in which it is granted and shall be renewed each following school year upon fulfilling the requirements of the subsections (1) through (3) of this section.

Upon fulfilling the requirements of this section, a student with asthma may possess and use asthma medications when at school, at a school-sponsored activity, under the supervision of school personnel or before and after normal



school activities while on school properties including school-sponsored child care or after-school programs.

Sources: Laws, 2003, ch.493, 1, effective from and after July 1, 2003.

2.8.3 UNDERSTANDING AND ASSESSING IMMUNIZATION REQUIREMENTS

2.8.3-a School Entry Immunization Requirements Effective School Year 2007-2008

VACCINE/ANTIGEN	NO. OF DOSES
Diphtheria, Tetanus, Pertussis (DTaP) ^b	5*
Polio (IPV)	4**
Hepatitis B	3
Measles, Mumps, Rubella (MMR)	2
Varicella (chickenpox)	2***

All children entering a Mississippi school (any grade) for the first time will be required to have the above listed immunizations.

Children entering a Mississippi school after their seventh birthday, and failing to meet the above DTaP requirements will need at least 3 total doses of diphtheria/tetanus containing vaccine (Td). Tdap should be used as one of the three diphtheria/tetanus containing vaccines (preferably as the first of the 3 doses) for children age 10 years and older.

*If the fourth dose is received on or after the fourth birthday, a fifth dose is not required.

**If the third dose is given on or after the fourth birthday, a fourth dose is not required.

***If there is a history of chickenpox, the vaccine is not required.

2.8.3-b New Immunizations Requirements for 2007-2008 School Year

The Mississippi Department of Health (MSDH) announced two new requirements for childhood immunizations effective for the 2007-2008 childcare and school year. These requirements are recommended by the Advisory Committee on Immunization Practices and must be met in order for a child to enroll in any childcare facility or school within the state.

PNEUMOCOCCAL CONJUGATE VACCINE (PCV7)

Effective August 1, 2007, the Pneumococcal Conjugate Vaccine (PCV7) or "Prennar," has been added as a childcare requirement for children under 5 years old entering childcare for the first time. Parents/guardians of children already in childcare should also start making plans to make sure their children have been vaccinated with this pneumonia vaccine. Beginning January 2008, all children, including those already enrolled in childcare, will be required to be vaccinated with recommended doses of the pneumococcal vaccine.

Research has shown the vaccine virtually eliminates invasive pneumococcal disease (including meningitis) in infants and young children, according to Joy Sennett, Director of Communicable Diseases for MSDH.

Pneumococcal Conjugate Vaccine (PCV7) is available at all county health departments and from Vaccines for Children providers for a \$10.00 administrative fee each.

VARICELLA VACCINE (CHICKENPOX VACCINE)



Additionally, effective August 1, 2007, children entering school for the first time will be required to have two doses of the Varicella vaccine (chickenpox vaccine) or a history of chickenpox. Research shows the success rate of 80% to 85% with one dose increases to more than 90% efficacy with two doses. One dose of Varicella vaccine or a history of chickenpox became a requirement for entry into childcare and five-year-old kindergarten in 2002.

Varicella vaccine (chickenpox vaccine) is available at all county health departments and from Vaccines for Children providers for a \$10.00 administrative fee each.

NOTE: MSDH's Immunization Registry Program records immunizations received by individuals from public clinics and participating private doctors. Records for many adults and most children are available for parents/guardians and qualified professionals. For more information on immunizations, the public can call the Mississippi Department of Health at 1-866-HLTHY4U (1-866-45804948) or visit the Immunization section of www.msdh.state.ms.us.



3

INFECTION PREVENTION
& CONTROL GUIDELINES

3.1 Introduction

This section contains resource information about reducing exposure to pathogens that may be transmitted by blood and body fluids.

Schools that operate school nursing services that involve invasive procedures such as venipuncture, administration of parenteral medications, catheterizations, and other similar procedures are advised to develop a school-specific exposure control plan, taking these guidelines into consideration.

Effective implementation of exposure control policies involves the school staff, students, and parents/guardians. The school nurse can serve as a consultant to effective exposure control in the school setting.

The most effective precautionary method for preventing or reducing the transmission of pathogens is hand-washing. A brief hand-washing procedure is included in this document.

The Centers for Disease Control and Prevention (CDC) has more information on infection control techniques for specific pathogens (such as influenza) in various settings (www.cdc.gov).

3.2 Disease Prevention and Safety Precautions

While excluding children with communicable diseases from school helps prevent the spread of disease, there are basic disease prevention measures that should be taken on a routine basis. The MSDH recommends the following disease prevention practices:

ENFORCE HAND-WASHING

It is the responsibility of the school system, as well as the family and community, to teach and promote good health and hygiene practices. Since person-to-person contact can play a significant role in the spread of some enteric pathogens, hand hygiene is a critical element of any outbreak prevention and control strategy. Most experts would agree that hand-washing is the single most effective hygienic practice that prevents the spread of germs in an institutional setting as well as in an individual's home.

The practice of good hand-washing while at school requires the provision of warm running water, liquid soap, and a sanitary method for drying hands (e.g., single-use disposable paper towels, warm air dryers).

Hand-washing facilities should be readily accessible to the general school population, all school nurses, and especially those performing at-risk tasks. Children should be encouraged to wash their hands especially before eating and after bathroom usage.

During outbreaks of acute gastroenteritis, all students, faculty and staff should be advised and reminded to wash their hands frequently to prevent the propagation of the illness.

Although the CDC does not endorse the use of hand sanitizers in lieu of hand-washing with soap and warm, running water, there should also be a means of providing some type of hand cleaner or individual, pre-moistened towelettes for cleaning hands in the event of a



water system failure. Hand sanitizers containing 60-90% ethyl alcohol or isopropanol in concentration with equivalent sanitizing strength may be used as an adjunct to proper hand washing.

Steps to proper hand-washing according to the CDC

- Hands should be washed using soap and warm, running water.
- Hands should be rubbed vigorously during washing for at least 20 seconds with special attention paid to the backs of the hands, wrists, between the fingers, and under the fingernails.
- Hands should be rinsed thoroughly while the water is running.
- With the water running, hands should be dried with a single-use towel.
- Turn off the water using a paper towel, shielding washed hands to prevent re-contamination.

Hands should be washed after the following activities:

- After touching bare human body parts other than clean hands and clean, exposed portions of arms.
- After using the toilet.
- After coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating, or drinking.
- After handling soiled equipment or utensils.
- Before, during and after food preparation, as often as necessary to remove soil and contamination and to prevent cross-contamination when changing tasks.
- After engaging in other activities that contaminate the hands.

MAINTAIN SAFE DRINKING WATER SUPPLY

The MSDH recommends that each school obtain water from a water system that meets the Mississippi Safe Drinking Water Act standards. It is also recommended that schools have a means for providing safe drinking water in the event of a breakdown in the water system (e.g., providing bottled water during this time).

DISCOURAGE SCHOOL ATTENDANCE OF ILL STUDENTS

The MSDH recommends that schools do not implement policies that would encourage or require students to attend school when they are ill.

SAFELY HANDLE NEEDLES AND SYRINGES

Safety needle devices are recommended to eliminate or minimize exposure incidents.

Needle/syringe units with engineering controls allowing retraction of the contaminated needle are recommended for injections.

Needle holders/cuffs for venipuncture needles with engineering designs allowing retraction of the contaminated needle into the holder are recommended for venipuncture procedures.

Schools should have a policy on disposal of sharps including needles and syringes which describes procedures to safeguard against contamination exposure.

OTHER SAFETY PRECAUTIONS

Gloves should be worn when reasonable anticipation of contact with blood, blood products or body fluid is expected.

School nurses who have exudative lesions or weeping dermatitis shall refrain from all direct student care and from handling student care equipment until the condition is resolved.



The school nurse should be familiar with the Department of Education and the CDC guidelines for handling an HIV-positive student in the school setting. Pregnant school nurses are not known to be at greater risk of contracting HIV infection than non-pregnant health care workers; however, if a school nurse develops HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. Because of this risk, pregnant school nurses shall be especially familiar with and strictly adhere to precautions to minimize the risk of HIV transmission.

Schools should have policies that address the cleaning of equipment, mannequins, and other health care items to avoid the spread of pathogens.

Note: Some of the above information was taken from the *Communicable Disease/Conditions and Return to School Guidelines* prepared by the division of Epidemiology/Office of Community Health Services MSDH.

Note: For educational material regarding personal hygiene, etc., contact the School Health Coordinator at the Mississippi State Department of Health, Division of Health Promotion/Education/Chronic Illness.

3.3 RETURN TO SCHOOL GUIDELINES FOR COMMUNICABLE DISEASE/CONDITIONS

School administrators and teachers are required to make frequent decisions regarding when children with communicable diseases/conditions should be allowed to attend or return to school. This section will help with these decisions.

It contains information about the most common or important communicable diseases/conditions and how they are spread. Information is listed about the different times during which infectious agents may be transmitted from one person to another, and when it is usually safe for someone who has one of these conditions to return to school.

The "return to school" times are based on the usual period of time that a person is considered to be contagious — not on the period of time that may be necessary for full clinical recovery from the signs or symptoms of an illness which may vary a great deal from person to person. While children must be protected from contagious conditions, no child should be excluded from school longer than is necessary.

With the exception of tuberculosis (TB), the communicable diseases/conditions listed in this section do not require a note or release from the Mississippi State Department of Health (MSDH) for a child to return to school.

While this will serve as a guide for school attendance of children with communicable conditions, the MSDH welcomes the opportunity to help with your decisions. Contact your district health department office or the Division of Epidemiology in Jackson to speak with a consultant or make arrangements with the local or district health department for someone to speak to the faculty and staff of your school.

Note: This is not intended to be used to diagnose an illness or infection. It should not replace a diagnosis by trained medical personnel.

3.3.1 CHICKENPOX (VARICELLA)

Chickenpox is a highly infectious viral disease that begins with small red bumps that turn into blisters after several hours. The blisters generally last for 3-4 days and then begin to dry up and form scabs. These lesions (bumps/blisters) almost always appear first on the trunk rather than the extremities.



MODE OF TRANSMISSION

Airborne droplets of nose and throat secretions coughed into the air by someone who has chickenpox. Also, indirectly through articles freshly soiled with discharge from the lesions (blisters) and/or discharge from the nose and mouth (e.g., tissues, handkerchiefs, etc.).

VACCINE INFORMATION

A vaccine for chickenpox is available and is recommended for children after 12 months of age and for adolescents and adults who do not have a reliable history of chickenpox disease. This vaccine is now required to attend school or proof the student has had chickenpox.

RETURN TO SCHOOL

Once the diagnosis has been made, determine the day that the lesions (bumps/blisters) first appeared. The child may return to school on the sixth day after the lesions first appeared or earlier if the lesions are crusted and dry and no new ones are forming. Keeping the child home until all the lesions are completely healed is unnecessary and results in excessive absence from class.

3.3.2 FIFTH DISEASE (ERYTHEMA INFECTIOSUM)

This is an infectious disease characterized by a "slapped-face" (redness) appearance of the cheeks followed by a rash on the trunk and extremities.

MODE OF TRANSMISSION

Person-to-person spread by direct contact with nose and throat secretions of an infected person. Transmission of infection can be lessened by routine hygienic practices which include hand-washing and the proper disposal of facial tissues containing respiratory secretions.

RETURN TO SCHOOL

Children with fifth disease may attend school if they are free of fever, since by the time the rash begins they are no longer contagious. The rash may come and go for several weeks. Pregnant teachers should consult their obstetrician if children in their class have fifth disease.

3.3.3 FLU (INFLUENZA)

Influenza is an acute (sudden onset) viral disease of the respiratory tract characterized by fever, headache, muscle aches, joint pain, malaise, nasal congestion, sore throat and cough. Influenza in children may be indistinguishable from diseases caused by other respiratory viruses.

MODE OF TRANSMISSION

Direct contact with nose and throat secretions of someone who has influenza or airborne spread by these secretions being coughed into the air.

RETURN TO SCHOOL

The student may return to school when free of fever and feeling well. The closing of individual schools has not proven to be an effective control measure. By the time absenteeism is high enough to warrant closing, it is too late to prevent spread.

3.3.4 HEAD LICE (PEDICULOSIS)

This is an infestation of the scalp by small "bugs" called lice. They firmly attach egg sacs called "nits" to the hairs, and these nits are difficult to remove.



Head lice, *Pediculus humanus capitis*, are a common problem in school children in Mississippi. Although they do not transmit any human disease, they may be a considerable nuisance, and require conscious effort on the part of school officials and parents/guardians to control.

It should be understood that head lice can only be controlled in schools, not eliminated; they will occur sporadically, and will recur even after control efforts. The goal of control efforts is to reduce the problem and its impact, and minimize spread.

Head lice are not a product of poor personal hygiene or lack of cleanliness and their presence is not a reflection on the school or the family. More harm is probably caused by misconceptions about head lice than by the lice themselves.

MODE OF TRANSMISSION

Direct contact with an infested person's hair (head-to-head) and, to a lesser extent, direct contact with their personal belongings, especially shared clothing and headgear. Head lice do not jump or fly from one person to another, but they can crawl very quickly when heads are touching.

IDENTIFYING INFESTED CHILDREN

By Screening

It is important to establish a regularly scheduled screening program for all students in grades K-6 and for older age groups if the problem arises. Screening should be done by the school nurse, teachers or other school staff after they have been instructed in the technique. The recommended times for screenings are at the beginning of the school year and after winter and spring breaks. Screening should occur more often if infested children are found.

By Individual Case

Throughout the year, any student suspected of having head lice (usually because he/she is scratching his/her head frequently) should be examined by the teacher, and if evidence of infestation is seen, re-examined by the school nurse or other "confirming" examiner. If infested, the child should be handled as described in Appendix A, Section 1.1.1.

Note: If one child in a classroom is found to be infested, the whole class should be screened as described above.

EXCLUSION

An infested child's parents/guardians should be notified that the child has been found to have head lice and that he or she must receive the proper treatment before returning to school. It is not necessary to remove the infested child from school before the end of the school day. Care must be taken not to embarrass or stigmatize the child.

RETURN TO SCHOOL

Treatment and removal of nits are described in Appendix A, Section 1.1.1

- The child may return to class without a physician's release 24 hours after the first treatment has been given. Evidence of treatment should be provided, such as a note from a parent/guardian describing the treatment (e.g., "Johnny was treated with 'name of product used' according to package directions on 8/17/08.") or presenting the empty bottle, with the label intact, of the product used. The treatment should be an approved medical treatment and not a home remedy.
- Examination of a treated child by a physician or the county health department is usually not indicated and unnecessarily involves health care personnel.
- Nits may still be seen even in an adequately treated child. This is not evidence of continuing infestation if the child has been properly treated and no adult lice are



present.

Note: According to the American Academy of Pediatrics, Red Book 2000, "no-nit" policies that require children be free of nits before returning to school have not been proven effective in controlling the transmission of head lice.

3.3.5 HEPATITIS A

Hepatitis A is an infectious viral disease characterized by jaundice (yellowing of eyes and skin), loss of appetite, nausea, and general weakness.

MODE OF TRANSMISSION

Hepatitis A virus is found in the stool of persons with hepatitis A. The virus is usually spread from person to person by putting something in the mouth that has been contaminated with the stool of an infected person; for this reason, the virus is more easily spread under poor sanitary conditions, and when good personal hygiene, especially good hand-washing, is not observed. In rare cases, the virus is contracted by drinking contaminated water or by eating raw seafood (e.g., raw oysters) that has been collected from contaminated waters. Schoolroom exposure generally does not pose a significant risk of infection, and treatment of school contacts is not usually indicated.

RETURN TO SCHOOL

Children may return to school one week after the onset of jaundice or one week after the onset of other signs and symptoms if no jaundice is present.

3.3.6 HEPATITIS B

Hepatitis B is an infectious viral disease characterized by loss of appetite, abdominal discomfort, jaundice (yellowing of eyes and skin), joint aches, and fever in some cases. There is no risk of transmission of hepatitis B in a normal classroom setting unless a person who is infected with hepatitis B is bleeding. Since hepatitis B and HIV/AIDS are both transmitted through blood exposure, the precautionary measures for HIV/AIDS would also apply to hepatitis B.

MODE OF TRANSMISSION

The most common mode of transmission is through sexual intercourse with someone who has the virus; however, it can be transmitted when infected blood enters the body through cuts, scrapes or other breaks in the skin. Injecting drug users are at risk when they share needles with an infected person. It is also possible for infected pregnant women to transmit the virus to their children during pregnancy or at delivery.

If an exposure to a person who is infected with hepatitis B has occurred, the person exposed should be referred to his/her physician since hepatitis B vaccine and hepatitis B immune globulin may be indicated.

RETURN TO SCHOOL

Student may return to school when released by their personal physician.

3.3.7 HEPATITIS C

Hepatitis C is also a viral disease that affects the liver. Again, hepatitis C should pose no risk of exposure in the normal classroom setting unless the infected person is bleeding. There is no vaccine available for hepatitis C at this time.

MODE OF TRANSMISSION

Since it is also transmitted through blood exposure, the same precautionary measures for hepatitis B and HIV/AIDS would apply to hepatitis C.



RETURN TO SCHOOL

Student may return to school when released by their personal physician.

3.3.8 HUMAN IMMUNODEFICIENCY VIRUS (HIV) & ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

HIV is any of the severe retroviruses that infect and destroy helper T cells of the immune system, causing the marked reduction in their numbers that is diagnostic of AIDS. AIDS is the disease of the human immune system caused by HIV.

MODE OF TRANSMISSION

The most common mode of transmission is through sexual intercourse with someone who has the virus; however, it can be transmitted when infected blood enters the body through cuts, scrapes or other breaks in the skin. Injecting drug users are at risk when they share needles with an infected person. It is also possible for infected pregnant women to transmit the virus to their babies during pregnancy or at delivery. Although HIV and hepatitis B are transmitted in the same way, HIV is much more difficult to transmit from one person to another than hepatitis B.

HIV infection in children causes a broad spectrum of disease manifestations and a varied clinical course. No cases of HIV transmission in school have been reported, and current epidemiologic data do not justify excluding children with HIV infection from school or isolating them in school to protect others. Because blood exposures from fights, unintentional injuries, nosebleeds, shed teeth, menstruation and other causes may occur at school, all schools should be prepared to handle blood and blood-containing body fluids using the principles of universal precautions (treating blood and body fluids of all persons as infectious). Supplies of gloves, disposable towels and disinfectants should be readily available. There is no evidence that HIV, hepatitis B or hepatitis C is transmitted through tears, perspiration, urine or saliva unless these body fluids contain visible blood.

Participation in some contact sports may increase a child's risk of exposure to blood: forceful contact with hard surfaces, equipment, or other players may result in laceration or abrasion and close player-to-player contact may lead to direct exposure to another person's blood. Nonetheless, the risk of HIV transmission during sports is probably low. However, because of the potential risk to the athlete's own health and the theoretical risk of HIV transmission to others during contact sports, athletes with HIV infection interested in participating in contact sports such as wrestling, boxing or football should be evaluated on a case-by-case basis. The Mississippi State Department of Health is available for consultation in these situations.

3.3.9 IMPETIGO

This is a contagious skin disease characterized by spreading pustular lesions (sores with pus) and should receive medical treatment. This is quite important to avoid the risk of complications involving the heart and kidneys.

MODE OF TRANSMISSION

Skin-to-skin contact with the sores.

RETURN TO SCHOOL

The child may return to class 24 hours after treatment has been started. Lesions that are still oozing and are on exposed skin surfaces should be covered.



3.3.10 MEASLES (RUBEOLA)

This is a serious viral infection characterized by a rash (red, flat lesions) starting on the head and neck, which enlarge and coalesce (run together), and spread to the trunk, then to the extremities. Other symptoms include a high fever, conjunctivitis (red, inflamed eyes), cough and nasal congestion. The Health Department must be notified on first suspicion.

MODE OF TRANSMISSION

Direct contact with nose and throat secretions of an infected person. May be airborne by droplets of these secretions coughed into the air. Tiny droplets can be suspended in the air for two hours or more. Measles is very easily spread.

RETURN TO SCHOOL

The child may return to school when free of fever and the rash is fading (this usually takes 5 to 7 days).

3.3.11 MENINGITIS

Meningitis is an inflammation or infection of the meninges (the membranes that cover the brain and spinal cord). Meningitis can be caused by a variety of organisms or germs.

MODE OF TRANSMISSION

These germs are most commonly spread by direct contact with nose and throat secretions from an infected person. Most people exposed to these germs do not develop meningitis or serious illness. Some people may carry a particular germ and have no symptoms at all. Anyone exhibiting signs and symptoms of meningitis (e.g., severe headache, fever, vomiting, stiffness and pain in the neck, shoulders and back, drowsiness) should seek medical attention promptly.

Meningitis is a reportable disease. The MSDH evaluates each case individually to determine what public health intervention, if any, might be required. The two types of meningitis that require public health intervention most often are caused by the organisms *Haemophilus influenzae* type b and *Neisseria meningitidis* (meningococcal).

RETURN TO SCHOOL

The individual may return to school whenever he or she has been released by their personal physician.

3.3.12 MONONUCLEOSIS-INFECTIOUS

This is an infectious disease characterized by fever, sore throat, swollen glands in the neck area, and generalized weakness. Intimate contact, such as kissing or sharing drinking glasses or straws, is usually required for transmission.

MODE OF TRANSMISSION

Person-to-person spread by direct contact with the saliva of an infected person.

RETURN TO SCHOOL

The child need not be excluded from class, unless requested for medical reasons, but may return when feeling well enough. Children should not share food or utensils.

3.3.13 MUMPS (PAROTITIS)

This is an infectious viral disease characterized by swelling and pain of the salivary glands.



MODE OF TRANSMISSION

Person-to-person spread by direct contact with the saliva of an infected person.

RETURN TO SCHOOL

Children may return to school 9 days after the beginning of the salivary gland swelling.

3.3.14 PINK EYE (CONJUNCTIVITIS)

This is an infectious disease characterized by redness of the eye(s), excessive tearing, itching, and discharge. Some cases may require antibiotics; therefore, a physician should be consulted.

MODE OF TRANSMISSION

Contact with discharges from the eye, nose or throat of an infected person. Also, from contact with fingers, clothing and other articles such as shared eye make-up applicators that have been contaminated with the discharge.

RETURN TO SCHOOL

Children may return to school after a physician has been consulted, or when redness/discharge is improving.

3.3.15 RINGWORM (TINEA)

Ringworm is a fungus, not a worm. *Tinea corporis*, *Tinea pedis*, *Tinea versicolor*, ringworm any place except on the scalp or under the nails, can be successfully treated with several over-the-counter medicines. When the lesions (red, circular places) are found, it is reasonable to send a note home with the child indicating a need for treatment.

MODE OF TRANSMISSION

Direct skin-to-skin contact or indirect contact (e.g. toilet articles, such as combs and hair brushes, used towels, clothing, and hats contaminated with hair from infected persons or animals).

Tinea capitis, ringworm of the scalp, is characterized by inflammation, redness, and hair loss and does not respond to over-the-counter medicines; therefore, the student should see his/her physician. Students should be discouraged from sharing combs, brushes, and hats because these are possible sources for infection. Medical treatment is also indicated for ringworm of the nails.

RETURN TO SCHOOL

The child may return to school after treatment has been started. Treatment usually lasts several weeks, but prolonged absence from class is unnecessary. When ringworm is discovered, there is no need for the parent/guardian to make a special trip to school to get the child.

3.3.16 SCABIES (SARCOPTES)

Scabies is a highly communicable disease caused by an arachnid, *sarcoptes scabie*, also known as the "itch mite."

Any child with evidence of severe itching especially around webs of fingers, wrists, elbows, under arms and belt line should be referred to his/her physician. Scabies requires treatment by prescription drugs.

MODE OF TRANSMISSION

Direct skin-to-skin contact with an infested person.



RETURN TO SCHOOL

The child may return to school as soon as treatment has been administered. It must be noted that itching may continue for several days, but this does not indicate treatment failure or that the child should be sent home.

3.3.17 SCARLET FEVER (SCARLATINA)

Scarlet fever is a streptococcal infection with a rash (scarlatina-form rash). It is most commonly associated with strep throat. In addition to the signs and symptoms of strep throat, the person with scarlet fever has an inflamed, sandpaper-like rash and sometimes a very red or "strawberry" tongue. The rash is due to a toxin produced by the infecting strain of bacteria.

MODE OF TRANSMISSION

Contact with nasal and/or oral secretions of an infected and/or carrier of streptococcus.

RETURN TO SCHOOL

The student may return to class 24 hours after treatment has been started if free of fever.

3.3.18 SHINGLES (VARICELLA ZOSTER)

Shingles (varicella zoster) is a reactivation of the chickenpox virus (varicella). After the initial infection with chickenpox, the virus continues to lie dormant (inactive) in a nerve root. People often think of the elderly and immunosuppressed individuals as the ones who have shingles; however, it can and does occur sometimes in children. The lesions or blisters of shingles resemble those of chickenpox and usually appear in just one area or on one side (unilateral) of the body and run along a nerve pathway. A mild shingles-like illness has been reported in healthy children who have had the chickenpox vaccine. This is a rare occurrence.

MODE OF TRANSMISSION

It is possible for someone who has never had chickenpox disease or the vaccine to get chickenpox by coming in contact with the fluid from the lesions of someone who has shingles. Shingles itself is not transmissible. A person who has shingles does not transmit chickenpox through the air as does someone who has chickenpox disease.

RETURN TO SCHOOL

The child who has shingles may attend school if the lesions can be covered by clothing or a dressing. If the lesions cannot be covered, the child should be excluded until the lesions are crusted and dry. Thorough hand-washing is warranted whenever there is contact with the lesions.

3.3.19 "STREP THROAT" (STREPTOCOCCAL PHARYNGITIS)

Strep throat is a communicable disease characterized by sore throat, fever, and tender, swollen lymph glands in the neck. The child should see a physician to obtain prescription medication; this is quite important to avoid the risk of complications involving the heart and kidneys.

MODE OF TRANSMISSION

Direct or indirect contact (e.g., contaminated hands, drinking glasses, straws) with throat secretions of an infected person.

RETURN TO SCHOOL

The student may return to class 24 hours after treatment has been started if free of fever.



3.3.20 TB (TUBERCULOSIS)

TB is an infectious disease caused by the tubercle bacillus, mycobacterium. TB is characterized by inflammatory infiltrations, necrosis, fibrosis, and calcification most often seen in the respiratory system but able to affect other body parts.

MODE OF TRANSMISSION

Airborne droplets of respiratory secretions coughed or sneezed into the air by a person with active TB disease.

RETURN TO SCHOOL

Those who have a positive TB skin test only may attend school since they have no disease process that is contagious. Persons diagnosed with active TB disease will need written permission from the Mississippi State Department of Health Tuberculosis Control Program to return to school.

3.3.21 WHOOPING COUGH (PERTUSSIS)

Pertussis is a contagious disease characterized by upper respiratory tract symptoms with a cough, often with a characteristic inspiratory (breathing in) whoop. The child will need to see a physician to be treated with antibiotics. Furthermore, the contacts of the child will also need to be treated with antibiotics.

MODE OF TRANSMISSION

Direct or indirect contact (contaminated articles) with nose and throat secretions of an infected person or by inhaling droplets of these secretions coughed into the air.

RETURN TO SCHOOL

The student may return to school five days after treatment has begun.



4

SELECTED PROBLEM
MANAGEMENT

4.1 Introduction

This section contains selected guidance for the school nurse to consider in managing specific health problems common to school-age children. It is not intended to replace physician orders or updated information that may be obtained from nursing or other appropriate textbooks.

The school nurse is encouraged to keep his or her knowledge in the area of school health and well child health care current so as to recognize the need for changes in his or her practice as appropriate.

If the school nurse is looking for information on a health problem or issue unique to the school setting, the National Association of School Nurses offers position papers and statements on selected topics. Access these at www.nasn.org. Click on "Position Statements" and select the topic of interest.

4.2 Common Complaints And Temporary Ailments

4.2.1 CONSTIPATION *[as diagnosed by a physician or nurse practitioner]*

Constipation is characterized by hard, dry, small stools regardless of the frequency of defecation. If abdominal discomfort, straining during stooling, and/or abdominal fullness occurs in addition to hard, dry, small stools, special management is indicated.

MANAGEMENT

- Obtain good history to determine if cause of constipation is due to diet (too little fiber or fluids, inadequate or excessive milk intake, too little bulk in diet), use of suppositories, enemas or cathartics, failure to develop regular toilet habits, special disease state (hypothyroidism, marked anemia, congenital megacolon), mechanical obstruction, special rectal conditions (pain on defecation, anal fissure, anal rectal stenosis), or drugs.
- If cause is due to inadequate fiber or fluid intake, counsel regarding exercise and the addition of dietary bran or leafy vegetables and fruit, especially raw fruit. Also recommend increased fluid intake.
- Encourage daily toilet habits in a relaxed atmosphere.
- Discourage use of enemas and suppositories unless prescribed.
- Offer nutrition education (as appropriate).
- Refer to physician for further evaluation if these measures are not effective.

4.2.2 DIARRHEA *[as diagnosed by a physician or nurse practitioner]*

Diarrhea is characterized by unformed or watery bowel movements at more than twice the normal rate. Associated with fever, nausea, vomiting, abdominal pain, cramping, or blood in the stool, diarrhea may be caused by a host of viral or bacterial agents, intestinal parasites, or dietary intolerance. Antibiotics commonly used in children are also associated with diarrhea. Diarrhea may be acute or chronic. Initial management of diarrhea is prevention and treatment of dehydration. Crying without tears, infrequent urination or very concentrated urine, and dry mucus membranes may evidence of dehydration.



MANAGEMENT

- Refer to a physician any child with high fever, dehydration, or blood in the stools.
- Obtain history to determine the severity of disease, including intake history, frequency and consistency of stools, vomiting, fever, etc. Family history and contact with other children are important, as well as questions regarding contaminated food or water.
- Perform physical assessment with careful search for evidence of dehydration, such as reduced skin turgor, tears, and urination.
- Any child with diarrhea should have an accurate weight recorded on the chart. Previous weight, if available, should also be noted.

4.2.3 FEVER *[as diagnosed by a physician or nurse practitioner]*

Temperature exceeding 38.3°C (101°F) orally in children greater than 2 months of age, or 37.2 (99°F) axillary is considered an elevation. Bacterial causes can be primary or secondary to a viral infection. Other causes of fever include chronic disease and cancer.

MANAGEMENT

- Refer to physician.
- Obtain history of duration and intensity of fever, changes in activity and appetite. Document any complaints from the student and any observed signs. Ask about previous health history, medications being taken, current immunizations, seizures, family history, and if anyone familiar to the student is sick at present.
- Educate family on compliance with prescribed treatment.
- Educate family on association of Reye's syndrome with aspirin containing medicines during influenza or chickenpox outbreaks.
- If necessary, educate parents/guardians on proper methods of taking temperature. The method of taking the temperature and the route/method of taking the temperature should be noted.
- Encourage increased fluid intake.
- Educate family on administering tepid sponge bath.
- Educate family on proper dosage/frequency of fever medicines. (Acetaminophen, etc).

4.2.4 HEADACHE *[as diagnosed by a physician or nurse practitioner]*

Headache is characterized by general or specific pain in the head.

MANAGEMENT

Simple headache with no suspected pathology may be treated with acetaminophen or ibuprofen according to a physician's order. Treatment should be given only once. Nursing assessment includes:

- Obtain a thorough history, including pattern of headaches as well as triggers.
- Refer for vision screening abnormalities as appropriate.
- Refer for follow-up and further evaluation any student suspected of having migraine or tension headaches.

4.2.5 MENSTRUAL CRAMPS (DYSMENORRHEA)
[as diagnosed by a physician or nurse practitioner]

As regular ovulatory cycles become established in adolescent girls, pain with menstruation or dysmenorrhea becomes more frequent. Dysmenorrhea is experienced by 65% of adolescent girls and is a leading cause of short-term school absenteeism.

MANAGEMENT

- Take thorough menstrual history. Refer any suspected underlying pathologic condition to a physician.
- Treat simple dysmenorrhea with acetaminophen or ibuprofen per standing order.



- Allow student to rest.

4.2.6 NOSEBLEEDS (EPISTAXIS) *[as diagnosed by a physician or nurse practitioner]*

Bleeding from the nose is most commonly caused in childhood by nose-picking, which results in abrasions of the mucosa of the nasal septum. Other causes include falls or blows to nose, dry air, chronic allergic rhinitis, bleeding diseases (hemophilia, leukemia, purpura), infections, foreign bodies, tumor, and occasionally, acute rheumatic fever.

MANAGEMENT

In mild bleeding, any of the following are usually successful:

- Compress the nose between fingers with moderate pressure for at least 15 minutes with the child sitting up straight.
- Use an ice pack over the bridge of the nose.
- If bleeding has not stopped after 45 minutes, refer student to a physician.
- Humidification of the home or child's bedroom may reduce the likelihood of nosebleeds.
- Application of a small amount of petroleum jelly or normal saline gel to nasal septum softens crusty areas and helps healing.
- Discouragement of nose-picking may help prevent recurrences.
- Recurrent or excessive bleeding should be referred to a physician.

4.2.7 STINGS/BITES *[as diagnosed by a physician or nurse practitioner]*

A skin puncture produced by teeth, mouth parts, and/or stingers of an insect or animal.

MANAGEMENT OF HUMAN BITES

- Cleanse the area with soap and water.
- Refer to physician.

MANAGEMENT OF BITES/STINGS

- Conduct a thorough assessment of the student. If systemic involvement is identified, refer to physician. Determine the need to implement anaphylaxis protocol.
- For less serious cases, if itching or local reaction occurs, recommend Benadryl cream per standing order.

MANAGEMENT OF TICK BITES

- Remove tick using tweezers. Avoid using force as this may cause the head of the tick to remain imbedded.
- Cleanse with soap and water.
- Refer to a physician immediately any child with a rash or fever associated with a tick bite.

Note: Control of Communicable Diseases in Man, 18th Ed. American Public Health Association, (2004) is a good reference here.

4.2.8 URINARY TRACT INFECTION *[as diagnosed by a physician or nurse practitioner]*

Urinary tract infections involve infections of any component of the urinary system. They may be characterized in infants and young children by irritability, urinary frequency, vomiting, diarrhea, loss of appetite, failure to thrive, and fever of unknown origin. In older children, sometimes urinary frequency, chills, headache, and painful urination may be reported. Fever, tenderness, and red and white blood cells in the urine may also indicate urinary tract infection in older children.

MANAGEMENT

- Refer to physician.
- Obtain history to find out if this is the first such illness.
- Perform physical examination.



- Conduct dipstick test for protein/glucose count/analysis of urine sample.
- Encourage parent/guardian to complete administration of student's medication as ordered.
- Instruct to increase fluid intake daily.
- Discourage bubble baths - especially in girls.
- If child is asymptomatic and physical exam otherwise normal, clean perineum and repeat the urine specimen. If protein on repeat urine is 2+ or greater, refer. Proteinuria may be associated not only with UTI but with other renal pathology as well.

4.2.9 VOMITING (EMESIS) *(as diagnosed by a physician or nurse practitioner)*

Forceful ejection of stomach contents through the mouth. Should be differentiated from spitting up (regurgitation) which is effortless and commonly seen in infants. Vomiting is commonly caused by a viral gastroenteritis but can indicate serious illness.

MANAGEMENT

Physician should see any child who appears dehydrated or has signs of concomitant infection.

- Obtain history to determine onset of vomiting, diarrhea, fever, or other symptoms. Ask about other symptoms in other family members and contacts.
- Perform physical assessment with careful search for evidence of dehydration. Record accurate weight and compare with previous weight.
- Instruct parent/guardian to give nothing by mouth for four hours. Initial feedings should be clear fluids, Sprite or 7-Up, in small quantities (teaspoonfuls). If no vomiting occurs after 3-4 hours, the amount may be increased to frequent small amounts. After 24 hours, previous formula may be offered and a bland diet for the older child.
- Continued vomiting requires a return to physician.
- Instruct parent/guardian on signs of dehydration.

4.3 Infections

4.3.1 DERMATITIS – ATOPIC (ECZEMA) *(as diagnosed by a physician or nurse practitioner)*

This condition is characterized by chronic, superficial inflammation of the skin with pruritis, vesiculation, exudation, and later lichenification. Sites involved depend on age of patient.

CHILDHOOD TYPE [CHILDHOOD DERMATITIS]

Involves predominantly the popliteal and antecubital fossae, the neck, wrists, and sometimes the hands and feet. This phase lasts from 2 years until adolescence. Some children will have involvement only of the soles of the feet, with cracking, redness, and pain.

ADOLESCENT TYPE [ADOLESCENT DERMATITIS]

May be manifested by hand dermatitis only.

The condition is suggested by the presence of intense itching, typical distribution, and the tendency to be chronic and relapsing. Atopic dermatitis has no known cause but there is a high incidence of asthma and hay fever in these patients and their families. A few patients with atopic dermatitis have immunodeficiency and consequent infection.

MANAGEMENT

- Obtain history of episodes, family history, and previous treatment.
- Counsel parents/guardians and students on general care of the skin and use of hypoallergenic soaps (e.g., Aveeno® bar).
- Suggest decreased use of soap and perfumed lotions and avoidance of oils, greasy lubricants, and rough clothing. Encourage cotton clothing and low-suds detergent.
- Suggest ways to increase the moisture retention of skin with liberal use of cleansing



solutions and short, drip dry baths. Management includes use of emollients while in the bath or immediately after.

- Humidification of the bedroom may be helpful.
- The acute phase requires prompt referral to a physician.

4.3.2 DERMATITIS – CONTACT *[as diagnosed by a physician or nurse practitioner]*

Acute inflammatory reaction of skin which has two categories:

- Reactions which occur on first contact and are usually produced by chemicals.
- Reactions which occur only in persons who have been previously sensitized. If the contact substance is eliminated, the dermatitis is usually self-limiting and disappears in about two weeks. The skin may be red and edematous and blisters may form.

MANAGEMENT

- Refer to physician those children who have extensive skin involvement or apparent infection.
- Obtain history to try identifying possible allergens.
- Instruct parents/guardians or students to:
 - Limit soap use and fabric softeners.
 - Prewash new articles of clothing and bedding with low suds detergent indefinitely. Extra rinse may be indicated if high suds detergent is used. Two cups of white vinegar in the second rinse will kill allergens such as fungus.
 - Use baking soda or oatmeal baths to reduce itching.
 - Trim finger nails to reduce scratching.
 - Keep the environment cool to reduce itching.
 - Avoid perfumes, lotions, and oils.

4.3.3 DERMATITIS – SEBORRHEIC *[as diagnosed by a physician or nurse practitioner]*

Erythema with yellowish, greasy scales, usually over the anterior fontanelle, but may be present on forehead, cheeks, between eyebrows, in axillae, and behind ears. It is not pruritic and has no vesicles but cracking of the skin may occur behind the ears. Increasing erythema and appearance of vesicles and crusting suggest atopic dermatitis.

MANAGEMENT

- Patients with pruritus, vesicles, crusting, or signs of bacterial infection should be seen by physician.
- Instruct parent/guardian to avoid oily lotions and creams.
- Use a soft brush to aid in loosening and removing the scales.
- Shampoo daily after loosening scales.
- Educate parent/guardian on signs of bacterial infection and counsel to return to physician if signs/symptoms occur or is persistent.
- Use hypoallergenic detergents.

4.3.4 HAY FEVER (ALLERGIC RHINITIS) *[as diagnosed by a physician or nurse practitioner]*

Sneezing, frontal headache, watery nasal discharge, and watery eyes. Acute onset is seasonal. Usually no fever.

MANAGEMENT

- Refer to physician when symptoms are unrelieved by removal of allergen and/or by non-prescription treatment.
- Obtain history of current medication, dosage, onset, duration and type of symptoms, and family history. Ask about previous episodes, including wheezing.
- Counsel against using antihistamine nasal sprays, unless prescribed.
- Discuss ways to minimize exposure to known allergens. Recommend showering to



- remove pollen.
- Educate family about allergens.

4.3.5 HEAD LICE (PEDICULOSIS) *[as diagnosed by a physician or nurse practitioner]*

Infestation of the hair and scalp with head louse. Transmitted by direct contact with affected individual or with their personal belongings. Itching can lead to excoriation and infection. Lice are generally found at the nape of neck and behind ears. Nits (ova) are securely attached to hair shafts. Cervical lymph nodes may be enlarged.

MANAGEMENT

- Refer to physician if a prescription is needed. Many effective products are available without a prescription at local pharmacies.
- Instruct family on application of pediculicide, either prescribed medication or over the counter preparations according to package directions.
- Instruct to comb hair with a fine-toothed comb to remove lice and as many nits as possible. Manually removing all nits helps to prevent re-infestation from remaining nonviable nits.
- Instruct family on cleaning of bed linen, clothes, towels, combs, and brushes. Nonwashable items can be sprayed with pediculicide or stored in plastic bags for ten days.
- Family members who require treatment should be dealt with at the same time.
- The child may return to class after the first treatment has been given.
- Control school environment by considering the following:
 - Children should not be allowed to share hair ornaments, brushes or combs. Hats, coats, scarves and the like should be hung or placed individually for each child and not stacked or hung on top of those belonging to other children. Wall hooks, if used, should be far enough apart that garments hung on adjacent hooks do not touch. Sometimes plastic bags with draw strings are hung to contain garments if hooks are not far enough apart. Gym lockers used by more than one child should be assigned to the same users at each gym period to minimize the number of children using a locker. Headgear, including headsets, should be removed from use if lice are present in the class. If lice are an ongoing problem, headgear and headsets should be stored in an air-tight plastic bag for 2 weeks and not reused until the problem is resolved. Carpeted areas in classrooms should be vacuumed frequently and thoroughly. Lice killing sprays are generally unnecessary. Fumigation of classrooms or buses is not indicated.

Note: Pregnant women, small children and infants should not use over the counter lice treatment.

Note: *Control of Communicable Diseases in Man*, 18th Ed., American Public Health Association, (2004) is a good reference here. The NASN has a position statement on *Pediculosis in the School Community* (July 2004). www.nasn.org.

ROLE OF THE HEALTH DEPARTMENT

The local health department can provide instruction for principals and other staff designated by the school in how to examine for and recognize head lice. These staff can in turn instruct others, including classroom teachers, in the technique. A nurse or doctor is not necessary to identify head louse infestation. Principals should contact their local health department or the district public health office to arrange for instruction and/or reinstruction as needed.

Children should not be sent routinely to the health department to be "checked" or given a note before returning to school (see Section 3.3.6, "Return to School"). This only inconveniences the parents/guardians and does not contribute to controlling head lice.

According to Section 41-79-21 of the Mississippi Code of 1972, as amended:

"If a student in any public elementary or secondary school has had head lice on three (3) occasions during one (1) school year while attending school, or if the parent/guardian of the



student has been notified by school officials that the student has had head lice on three (3) occasions in one (1) school year, as determined by the school nurse, public health nurse or a physician, the principal or administrator shall notify the county health department of the recurring problem of head lice with that student. The county health department then shall instruct the child's parents/guardians on how to treat head lice, eliminate head lice from household items, and prevent their occurrence of head lice." The law also allows the health department to charge the child's parents/guardians a fee for services.

The school should designate the school nurse, teachers or other staff to be "confirming examiners" who will refer children to the health department.

To refer a child to the health department for this purpose, a form should be completed and sent with the child to the local health department. The examiner should notify the public health nurse by telephone of the referral so that the nurse will be expecting the child.

Questions about control methods, specific treatments, or special problems can be addressed to the local health department, the district public health office, or to the Office of Community Health Services - Division of Epidemiology, State Department of Health in Jackson.

Note: Use of specific product names is for example purposes only, and is not intended as endorsement of specific brands over others.

Note: See Appendix A, Section 1.1.2 for a sample letter to parents/guardians regarding information.

4.3.6 IMPETIGO *[as diagnosed by a physician or nurse practitioner]*

Localized, superficial, skin infection with lesions of varying size and shape with vesicles, and crusts on an erythematous base. The crust has been described as honey-colored. Impetigo is generally not accompanied by fever or other systemic reactions. Multiple occurrences in the same family are common. Caused by Group A streptococcus or staphylococcus.

MANAGEMENT

- Patients with numerous lesions, with or without regional lymph node enlargement and/or fever, should be seen by physician.
- Perform physical examination, including blood pressure and urinalysis, because of risk of glomerulonephritis in children three and over.
- Instruct patient and/or parent/guardian about the extreme contagiousness of the condition.
- Instruct patient and/or parent/guardian regarding antibacterial soaps and separate washcloths and towels for family members to prevent spread of infection. Disinfect tub.
- Instruct patient and/or parent/guardian regarding removal of crusts and application of antibiotic cream aids in healing.
- Stress hand-washing.
- Instruct that nails should be trimmed.
- Schedule return appointment in one to two weeks with caution to return to clinician immediately if lesions spread, fever occurs, or urine is noted to be smoky or red.
- Document blood pressure on return visit.

4.3.7 OTITIS *[as diagnosed by a physician or nurse practitioner]*

OTITIS EXTERNA

Pain in the ear. Overt symptoms are redness and discharge, which may be bilateral or unilateral, swelling of canal, and pain upon movement of ear. Often occurs after swimming.

OTITIS MEDIA

Otitis media is an inflammation of the middle ear. Usually associated with an upper respiratory infection but may be found in a febrile child with no upper respiratory infection.



OTITIS MEDIA-SEROUS

Tympanic membrane is dull and immobile. Follows episode of appropriately treated otitis media in 40%-50% of children and clears spontaneously in 85% of children within two months. Persistence is associated with an increased risk of repeat infection and the hearing loss adversely affects language development, intellectual functioning, and academic performance. When fluid levels or air bubbles are seen, the effusion is resolving.

MANAGEMENT

- Refer to physician.
- Stress the importance of completing the course of treatment.
- Reinforce avoidance of second-hand smoke.
- Document hearing loss, appearance of tympanic membrane, and speech/language development.
- Re-check hearing after resolution of otitis media.
- If hearing loss is documented, refer to physician for evaluation.

4.3.8 PHARYNGITIS *[as diagnosed by a physician or nurse practitioner]*

Inflammation of the musculomembrane at the back of the nose, mouth and larynx.

MANAGEMENT

- Refer to physician.
- Employ fever management measures.
- Other symptomatic family members should be educated also.

4.3.9 PINK EYE (CONJUNCTIVITIS) *[as diagnosed by a physician or nurse practitioner]*

Conjunctivitis is the inflammation of the delicate membrane that lines the eye (conjunctiva) and is associated with a discharge. Common in all age groups, but younger children are particularly susceptible. Physical findings are itching, excessive lacrimation, discharge, and edema of the eyelids and preorbital tissues. It is often very contagious.

MANAGEMENT

- Refer to physician.
- Teach parent/guardian and/or student to avoid touching bottle tip to eye of lashes when administering ophthalmic medicine.
- Teach parent/guardian and student proper hand-washing techniques, because some forms of conjunctivitis are highly contagious.
- Cool compresses may be helpful.
- Instruct parent/guardian and/or student to avoid:
 - Sharing washcloths, towels and pillows.
 - Rubbing the infected eye(s).
 - Irrigating the eye; this will spread infection.
 - Wearing eye make-up and to discard what has been used.

Note: *Control of Communicable Diseases in Man, 18th Ed., American Public Health Association, (2004)* is a good reference here.

4.3.10 PINWORM (ENTEROBIASIS) *[as diagnosed by a physician or nurse practitioner]*

Pinworm infestation is more common in pre-school age and school age children, the mothers of infected children, and the institutionalized. There may be no symptoms or sign of infestation until a family member visualizes the worms. There may be perirectal itching, vaginitis, vulvitis, insomnia, restlessness, and bedwetting. Adult worms may be seen in the perirectal area or on the surface of stool, particularly early in the morning. It is transmitted primarily by fingers and hands contaminated with pinworm eggs (fecal-oral route) or via shared toys, bedding, clothing, toilet seats, and baths.



Diagnosis is made by examining the worms, the Scotch tape test or by stool sample.

MANAGEMENT

- Refer for treatment if the family has seen adult worms. Other family members may have to be treated also.
- Emphasize need for hand washing after bathroom use and before cooking and eating. Stress the importance of hygienic measures (such as changing and washing sheets and undergarments and morning and evening showering of perirectal area).

Note: *Control of Communicable Diseases in Man*, 18th Ed., American Public Health Association, (2004) is a good reference here.

4.3.11 RINGWORM (TINEA) [as diagnosed by a physician or nurse practitioner]

Ringworm is a fungus not a worm.

TINEA CAPITIS (RINGWORM OF SCALP)

Tinea can appear as small reddened patches of baldness, "black dot alopecia" or kerion formation. Currently, most of the cases are transmitted from person to person but may be transferred from pets. It is contagious but recommendations are to return to school after oral therapy is begun and after antifungal shampoo. Topical treatment alone is not effective.

TINEA CORPORIS (RINGWORM OF BODY)

Tinea Corporis is a ring-shaped pink patch with a scaly raised border, possibly pruritic caused by fungus. Most commonly seen on face, neck, and arms, but may affect any part of the body and called jock itch when crotch infected. Tinea corporis is also contagious and direct contact should be avoided. Recommendations are to return to school after treatment is begun. There are several over the counter antifungal creams available.

TINEA PEDIS (ATHLETE'S FOOT)

Pruritic, red, scaly rash between toes. There may be blisters or cracks; scaling may extend to insteps.

TINEA VERSICOLOR

Fine scaly patches on upper trunk with decreased or increased pigmentation. Not usually pruritic. Caused by fungus. May become chronic or recurrent.

MANAGEMENT

- Refer to physician.
- Discuss treatment of other family members if infected.
- Instruct that cotton underwear (*tinea corporis*) or socks (*tinea pedis*) aids in keeping area dry.
- Instruct that repigmentation may take months (*tinea versicolor*).
- Teach family to complete full course of treatment for ringworm of scalp.

Note: *Control of Communicable Diseases in Man*, 18th Ed. American Public Health Association, (2004) is a good reference here.

4.3.12 ROUNDWORM (ASCARIASIS) [as diagnosed by a physician or nurse practitioner]

Roundworm is a parasitic infection of the intestinal tract. Roundworm is caused by ingestion of the ova in dirt contaminated by human feces. Student may have a history of passage of roundworms or with abdominal pain and respiratory symptoms.

MANAGEMENT

When ascariasis is considered and no worms have been seen, refer student to physician. Refer for treatment if adult worms have been seen by family. Other family members may have



to be treated also.

Emphasize need for hand-washing after bathroom use and before cooking or eating. Stress the importance of continued hygienic measures to prevent recurrence. Counseling should include possible need for retest or retreatment.

Note: *Control of Communicable Diseases in Man, 18th Ed., American Public Health Association, (2004)* is a good reference here.

4.3.13 SCABIES (SARCOPTES) [as diagnosed by a physician or nurse practitioner]

A parasitic infestation of skin by the mite *Sarcoptes*, scabies is transmitted by direct contact with an affected individual. The mite is rarely visible to the naked eye and the diagnosis is suggested by the appearance of linear burrows on wrists, ankles, fingerwebs, areolas, anterior axillary folds, genitalia, or face. Itching can lead to excoriation and infection.

MANAGEMENT

- Refer to physician.
- Instruct family on application of scabicide.
- Family members may require treatment and should be treated at same time. Establish L.M.P. on females prior to treatment.
- Instruct family on cleaning of clothes and bed linen.
- Make return appointment for follow-up treatment.
- Refer to communicable disease/conditions and return to school or return to childcare guidelines.

Note: *Control of Communicable Diseases in Man, 18th Ed., American Public Health Association, (2004)* is a good reference here.

4.3.14 STYE (HORDEOLUM) [as diagnosed by a physician or nurse practitioner]

Inflammation of the ciliary follicle and associated sebaceous glands of eyelid. Usually caused by *Staphylococcus aureus*.

May recur in some students due to rubbing the eyes. Comes to a head in 3 to 5 days and usually drains and heals.

MANAGEMENT

- Refer to physician if swelling or discoloration of eyelid occurs.
- Check for swelling of eyelid or bilateral involvement.
- Instruct parent/guardian in application of ophthalmic antibiotic ointment (if ordered by physician).
- Instruct parent/guardian to return as indicated by physician.
- Emphasize need for hand-washing, before and after application of ointment.
- Instruct to not wear eye makeup and to discard all used makeup.

4.4 Chronic Conditions

4.4.1 ACNE VULGARIS [as diagnosed by a physician or nurse practitioner]

Acne vulgaris is a skin disorder characterized by comedones, closed (whiteheads) or open (blackheads), appearing initially on the skin of the face of students from 8-10 years of age. During adolescence the closed comedones undergo inflammation and can progress to scarring. 30%-85% of children will experience acne during their adolescence.

MANAGEMENT

- Students with severe acne, with pustules and cysts, should be referred to a physician.
- Document extent of acne lesions.



- Educate student about need to use topical and/or oral medicines exactly as instructed by physician.
- Explain that approaches such as dietary management (if patient is sensitive to specific foods), good cleansing, and keeping the hair off the face are helpful. Acne is chronic. It cannot be cured, but it can be controlled; successful control may still mean one or two pimples a month.
- Emphasize that improvement may not be evident for 4-6 weeks.
- Counsel to avoid oil-based cosmetics, face creams and hair spray.

4.4.2 ANEMIA *[as diagnosed by a physician or nurse practitioner]*

Anemia is described as reduced hemoglobin concentration or red cell volume below the range for healthy children of the same age and sex. Symptoms and signs may only become evident when the hemoglobin falls to 6 gm/dL or hematocrit to 20%. Rapid growth during adolescence may deplete stores unless sufficient iron is present in the diet. Hemoglobinopathies, particularly sickle cell disease can be characterized by anemia, which does not respond to iron supplementation.

NORMAL HEMATOCRIT AND HEMOGLOBIN LEVELS

AGE	HEMATOCRIT	HEMOGLOBIN
1 - 6 years	31% - 43.5%	10 - 16 g/dl
6 - 12 years	36% - 45%	11 - 15.5 g/dl
12 - 18 years	37% - 54% (male) 36% - 47% (female)	13 - 18 g/dl (male) 11.5 - 16 g/dl (female)

MANAGEMENT

- Refer any student with HGB/HCT less than the lowest number on the chart to physician.
- Refer any student with bruising, petechiae, tachycardia or jaundice to physician.
- Document history to include details including anemia, hemorrhage, diet, pica, medicines, chronic or recurrent illnesses, risk for lead exposure, and excessive milk intake.
- Document family history, particularly about anemia or bleeding problems.
- Check results of newborn screening for hemoglobinopathies. For older children, obtain sickle cell screening or documentation of previous result.
- Check growth grid and diet.
- Perform physical assessment, noting color of skin and mucous membranes, presence or absence of petechiae, bruising, bleeding, hepatomegaly, or splenomegaly.
- If student is placed on iron supplements by physician, instruct on how to give medication. The side effects of iron therapy should also be discussed. Absorption of iron may be decreased if given with meals or with milk; iron may be given with juice. Iron can stain teeth; encourage student to follow medication with water, rinsing mouth, and/or teeth brushing. Stools may be black or green. Stress the importance of keeping iron out of reach of small children; it is highly toxic in large doses. Encourage a diet high in Vitamin C to ensure optimal absorption of iron from foods.

4.4.3 ASTHMA *[as diagnosed by a physician or nurse practitioner]*

Asthma is a chronic condition affecting 5%-10% of the children in the United States. Asthma is responsible for more hospital admissions, emergency room visits, and school absences than any other childhood disease. It can be serious and life-threatening, but it can also be controlled. Asthma occurs when the bronchioles overreact to various stimuli. During an acute episode, the airways become narrow or blocked, causing wheezing, coughing, and dyspnea. The most common stimuli are viral infections, exercise, allergens, environmental irritants, and stress.

MANAGEMENT

Asthma management typically consists of the following interventions:



- Medications - Beta agonists (inhaled or oral bronchodilators), theophylline (oral bronchodilator), steroids, and anticholinergics.
- Immunotherapy or hyposensitization therapy - decreasing sensitization to allergens.
- Child and family education.
- Environmental modification - avoiding or reducing exposure to irritants.
- Counseling - assistance with individual and family coping.

The school nurse can assist the student who is asthmatic with managing their condition in the following ways:

- Take a complete history of the student's asthmatic episodes and obtain medication orders and authorization for any asthma medications needed at school.
- Develop an asthma care plan that includes coordination with home and after-school activities, involves the family and other support systems, and involves special considerations for field trips.
- Keep accurate records of asthmatic episodes at school, including triggers, early warning signs, treatment, and student/family education.
- Assist physical education teachers to modify physical education requirements (as necessary).
- Assist teachers in modifying the student's environment as needed to reduce triggers.
- Assist the student in administering the prescribed medications (as needed).
- Counsel the student about regular class attendance and the importance of pre-medication prior to engaging in activities that trigger asthmatic episodes.
- Monitor the student's activities, medication compliance, and academic performance.

Note: NASN has a position statement on the use of asthma inhalers in the school setting. (June 1999). www.nasn.org.

Note: See Asthma Care Form found in appendix C and reference the American Lung Association for more information regarding asthma management.

4.4.4 DENTAL CARIES *(as diagnosed by a physician or nurse practitioner)*

MANAGEMENT

- Educate child and parent/guardian in proper techniques of oral hygiene appropriate to the age of the child. As multiple teeth appear, parents/guardians should begin daily brushing with a small toothbrush and a very small (pea-sized) amount of a toothpaste containing fluoride. To avoid gum tissue injury, a brush with soft, end-rounded or polished bristles should be used. Although children should actively participate in their dental care, they should continue to receive assistance from parents/guardians or other caregivers until they are seven or eight years old.
- Encourage use of fluoride toothpaste.
- Encourage Medicaid eligible clients to make appointment for annual dental assessment.
- School nurse consultation with the fluoride mouth rinse program at the State Department of Health may be appropriate.

Note: *Bright Futures in Practice: A Pocket Guide to Oral Health* (2004) is a good reference. National Maternal and Child Oral Health Resource Center, Washington, DC. www.mchoralhealth.org.



4.4.5 DIABETES *[as diagnosed by a physician or nurse practitioner]*

Diabetes mellitus is a metabolic chronic illness characterized by abnormal carbohydrate, fat, and protein metabolism. It is caused by an abnormality that results in decreased or absent secretion of insulin by the beta cells of the pancreas. Diabetes may be characterized as Type I or Type II, but most children have Type I.

MANAGEMENT

- Obtain and update a complete health history, including age at onset, level of control the child has experienced, other illnesses, difficulties in management, and prescribed medications.
- Observe student for signs and symptoms of insulin reaction or diabetic ketoacidosis.
- Counsel the student regarding dietary intake, glucose testing, medications, and injury prevention.
- Support the student with modifications in the school environment or schedule to accommodate snacks, glucose testing, and other activities necessary for appropriate diabetes management.
- Observe the student for alterations in self-esteem and body image and counsel accordingly.
- Report any concerns or complications to the student's parents/guardians and physician.

Note: The National Association of School Nurses has a position statement on the *School Nurse Role in Care and Management of the Child with Diabetes in the School Setting*, (June 2006). www.nasn.org.

4.4.6 HEART MURMUR *[as diagnosed by a physician or nurse practitioner]*

Sounds caused by vibrations due to abnormal blood flow through the valves or vessels of the heart. Murmurs may vary in intensity, the time at which they occur in the heart cycle, and their location.

MANAGEMENT

- Blood pressures, preferably in two extremities, should be recorded.
- Refer for evaluation by a physician.
- Immediate referral for associated acute symptoms of heart failure such as rapid breathing, liver enlargement, lethargy, pedal edema, and cyanosis.

4.4.7 OBESITY *[as diagnosed by a physician or nurse practitioner]*

A condition in which the student is found, on examination, to be at or greater than the 90th percentile level of weight for height or 95% BMI for age and sex or has crossed two lines on the growth grid in six months. There is no simple intervention for all cases. The family has to be studied as a unit for any intervention to be successful.

MANAGEMENT

- Perform physical examination.
- Obtain history of student and of family food intake and preferences, as well as physical activity.
- Encourage exercise. Explain that there is a positive correlation between hours of TV watching or computer use and obesity.
- Educate parent/guardian and student on long-term weight control.
- Schedule student to return regularly for weight checks.
- Refer to physician those children in the 95th percentile BMI for age or with rapid increases of percentiles.
- Establish nutrition plan.
- Encourage weekly weight check.

The school nurse should also be familiar with the many school-based initiatives that have been adopted to prevent obesity in the school-age population. See the Department of Education for



more details about these initiatives in Mississippi.

Note: The National Association of School Nurses has a position statement on Overweight Children and Adolescents (June 2002). www.nasni.org.

4.4.8 ORTHOPEDIC PROBLEMS *(as diagnosed by a physician or nurse practitioner)*

Orthopedic problems include any deformity, swelling, or loss of function in the musculoskeletal system. Abnormal appearance, position, or any complaint of pain of an extremity in any age child, and all hip problems, should be referred for evaluation.

MANAGEMENT

— Promptly refer the following conditions to a physician.

- Hip: definite “hip clunk”; asymmetrical abduction or skin folds; limited bilateral abduction.
- Clubfoot
- Scoliosis
- Intoeing:
 - Metatarsus adductus: over age of 2-3 months; marked, fixed forefoot deviation, with deep mid-foot crease.
 - Internal tibial torsion- Neuromuscular disease; severe functional complaint; or over age 2.
 - Femoral anteversion: functional complaints over age 8; neuromuscular disease; or asymmetrical.
- Bow Leg: over age 2; short stature and/or family history; or unilateral.
- Knock Knee: over age 7; short stature and/or family history; or unilateral.

Make initial referral to the primary care provider.

4.4.9 PREGNANCY *(as diagnosed by a physician or nurse practitioner)*

Teen pregnancy occurs in approximately one-quarter to one-third of Mississippi’s annual births. Most teen pregnancy occurs out of wedlock. Adolescent pregnancy is associated with premature births, increased infant mortality, child abuse, and poor maternal educational attainment. Adolescents who are pregnant are considered high risk for difficult or deformed births, but with appropriate prenatal care, good nutrition, and social support, the adolescent can deliver a healthy infant.

MANAGEMENT

The school nurse can assist in the care of the pregnant adolescent.

Interventions include:

- Refer to a physician for initiation of prenatal care.
- Refer to social services.
- Refer for nutrition counseling.
- Consider the possibility of rape or incest.

Ongoing monitoring of the pregnant adolescent in the school setting will involve close cooperation with the patient’s physician and may include:

- Routine B/P checks, urinalysis, and weight measurement
- Counseling regarding proper nutrition and prenatal vitamins.
- Counseling and referral as appropriate regarding infant care, social support, and return to school.
- Counseling regarding avoidance of alcohol and drugs and referral as appropriate.



4.4.10 SEIZURES *[as diagnosed by a physician or nurse practitioner]*

The school nurse can be instrumental in the identification of seizures and in providing education and support to students, teachers, and parents/guardians. Signs and symptoms vary with the type of seizure a student experiences, and the cause of seizures also varies. The school nurse needs to understand the various etiology associated with each type of seizure, the types of anticonvulsant medications that may be prescribed for the seizures, and the individualized plan of care for each student.

Common medications prescribed for students with seizures include Clonopin, Depakene, Depakote, Dilantin, Phenobarbital, Mysoline, Tegretol, or Zarontin. The school nurse should become familiar with the more common anticonvulsants in order to provide adequate counseling and monitoring for the student in his or her care.

MANAGEMENT

Monitoring of seizure activity includes:

- Obtain and update the student's health history, including an in-depth history of seizure onset, kind of seizure activity, triggers, aura(s), and prescribed medications.
- If seizure activity is observed, the school nurse should document the seizure activity, including frequency, date/time/duration, specific behaviors, aura, changes in level of consciousness, etc.
- Implement emergency medical care as needed.
- Counsel the student, teachers, and other staff regarding safety precautions should a seizure occur.
- Counsel the student regarding social adjustment, self-care needs, activity restrictions, and necessary modifications.
- Report any seizure activity to parents/guardians and to physician.



5

OVERVIEW: COOL KIDS PROGRAM DIVISION OF MEDICAID

5.1 Introduction

Mississippi Cool Kids (formerly EPSDT) is a free health care program for Mississippi's children, ages birth through 21, who are eligible for Medicaid. It provides a way for children to get medical exams, checkups, follow-up treatment, and special care they need to make sure they enjoy the benefits of good health. It is sponsored by the Office of the Governor, Division of Medicaid.

5.2 Services Covered Under Medicaid

- A complete physical examination : See Section 2.2
- Hearing and vision examinations : See Section 2.4
- Any shots that are needed : See Section 5.5
- Necessary blood and urine tests.
- An examination of child's development, including how he or she behaves, walks, talks, dresses, climbs and eats.
- An evaluation of family nutritional habits, including foods the student and his or her family eat.
- Medical referral or referral to another health care provider if special problems are discovered during the exam.
- Preventive/restorative dental care.
- Eyeglasses and hearing aids.
- Adolescent counseling services.
- Additional treatments and services that may be needed (such as additional office visits, prescriptions, and other therapy services).
- Help with transportation and appointments scheduling.

5.3 Places to Receive Medicaid

A Mississippi Cool Kids examination can be performed in an Approved Mississippi Cool Kids Clinic (listed below):

Local County Health Departments.
Limited School Systems.
Private and Public Provider Clinics.
Federally Qualified Health Clinics (FQHC).
Rural Health Clinics (RHC).

If the school nurse is working in a school setting which is considering requesting approval to perform these services, or if the school nurse is new to a school that has already been approved, he or she should be aware of the policies and procedures governing the performance of these studies, as well as the implications for billing. Information can be obtained from the Department of Education, Office of Healthy Schools and from the Division of Medicaid, Maternal-Child Health Program.

The provider manual for this program specifies the frequency and content of the well-child visits, based on the American Academy of Pediatrics', recommendations. The school nurse performing these assessment services should be familiar with the provider manual contents and requirements.



This section contains suggested anticipatory guidance for the nurse to use in providing health counseling and education to the children and their families under this program. Nothing in this section is designed to conflict with the policies and procedures of the Division of Medicaid or the Department of Education.

5.4 Anticipatory Guidance

5.4.1 AGE APPROPRIATE DEVELOPMENTAL AND SAFETY COUNSELING THREE YEARS OF AGE AND OLDER

AGE THREE

Development

- Jumps in place, kicks a ball, balances on one foot.
- Rides a tricycle.
- Knows own name, age, and sex.
- Copies a circle and a cross.
- Has a self-care skill (feeding, dressing).
- Shows early imaginative behavior.
- Talks constantly; has vocabulary of about 50 words.
- Can match primary colors.
- Names one color.
- Frequently practices by talking to him or herself
- Holds book without help; sits for 5-minute story or longer; likes rhymes and nonsense words.

Safety

- Ensure proper use of car seat.
- Supervise whenever in or near water.
- Test smoke detectors to ensure that they work properly.
- Keep poisons, medications, and toxic household products in locked cabinets or out of reach.
- Keep safety caps on all medications.
- Keep Syrup of Ipecac in the home.
- Keep poison control center number near the telephone.
- Know where child is at all times.
- Ensure that guns are locked up and that ammunition is stored separately.
- Never leave child alone in home or car.
- Teach pedestrian safety skills.
- Ensure that playgrounds are safe.
- Teach child not to talk to strangers.
- Choose caregivers carefully.

AGE FOUR

Development

- Can sing a song.
- Knows about things used at home (food, appliances).
- Draws a person with three parts.
- Is aware of gender (of self and others).
- Distinguishes fantasy from reality.
- Gives first and last name.
- Talks about his daily activities and experiences.
- Builds a tower of 10 blocks.
- Hops and jumps on one foot.
- Rides tricycle or bicycle with training wheels.
- Throws ball overhand.



- Turns pages one at a time; retells familiar story; pretends to read and write.

Safety

- Proper use of car seat or booster seat.
- Teach safety rules regarding strangers.
- Ensure that guns are locked up and that ammunition is stored separately.
- Know where child is at all times.
- Teach child about playground safety.
- Supervise whenever in or around water.
- Keep poisons, medications, and toxic household products in locked cabinets or out of reach; safety caps on all medications.
- Keep Syrup of Ipecac in the home; poison control center number near the telephone.
- Never leave alone in the car or home.
- Ensure that child wears a bicycle helmet when riding a tricycle or a bicycle with training wheels.
- Choose caregivers carefully.
- Teach safety around animals.

AGE FIVE

Development

- Dresses self without help.
- Knows own address and telephone number.
- Can count on fingers.
- Copies a triangle or square.
- Draws a person with a head, a body, arms, and legs.
- Recognizes most letters of the alphabet.
- Prints some letters.
- Plays make-believe and dress-up.
- May be able to skip.
- Proficient climber.
- Rides bicycle with training wheels.
- Knows common opposites like big/little and hard/soft.
- Enjoys 10-20 minute stories.
- Learns sequencing - what comes next.

Safety

- Ensure that child wears seat belt in the car at all times.
- Establish and enforce consistent, explicit, and firm rules for safe behavior.
- Supervise whenever in or near water.
- Teach child about safety rules for the home.
- Conduct fire drills at home; test smoke detectors to ensure that they work properly.
- Ensure that guns are locked up and that ammunition is stored separately.
- Teach safety rules for getting to and from school.
- Teach safety rules for bicycles; ensure that the child always wears a helmet when riding a bicycle.
- Teach the child about safety rules for interacting with strangers.

AGES SIX & SEVEN

Development

- Understands the meanings of most sentences.
- Names days of week in order and counts to 30.
- Tells month and day of birthday, name and address, left and right.
- Asks lots of why, what, and how questions.
- Achieves successful academic grades.
- Displays good school behavior, performance, and attendance.



- Participates in school activities and physically keeps up with children.
- Feels a sense of accomplishment.
- Recounts daily experiences.
- Enjoys reading aloud and using library card.

Safety

- Enforce consistent, explicit, and firm rules for safe behavior.
- Ensure that child wears a seat belt in the car at all times.
- Reinforce with the child safety rules for the home (fire drills, poisons, electrical tools, etc.).
- Ensure that guns are locked up and that ammunition is stored separately.
- Teach child about sports safety.
- Reinforce safety rules for getting to and from school, for interacting with strangers, for bicycles and playground equipment.
- Ensure that child is supervised before and after school in a safe environment.

AGES EIGHT & NINE

Development & Safety

- School grades.
- School behavior/attendance/high interest books.
- Participation in school activities.
- Achievements/acknowledgment of achievements.
- Limitation of TV and video/time.

AGE TEN

Development & Safety

- School grades.
- Special classes.
- School behavior/attendance.
- Participation in school activities.
- Achievements/acknowledgment of achievements.
- Any special interests/talents.
- Readiness for middle school.

AGES ELEVEN – TWENTY-ONE

Development & Safety

- Responsibility for good health habits.
- Physical and sexual growth and development.
- Social and conflict resolution skills.
- Good peer relationships with the same and opposite sex.
- Capacity for intimacy.
- Responsible sexual behavior and a sexual identity.
- Coping skills and strategies.
- Appropriate level of autonomy.
- Personal value system.
- Progression from concrete to formal operational thinking.
- Academic and career goals.
- Educational or vocational competence.

Tasks For The Adolescent

- Maintain good eating habits and dental hygiene.
- Exercise regularly and maintain appropriate weight.
- Use seat belt and helmet.
- Avoid alcohol, tobacco, and other drugs.
- Practice abstinence or safe sex.
- Engage in safe and age-appropriate activities.
- Manage negative peer pressure.



- Learn conflict resolution skills.
- Protect self from physical, emotional, and sexual abuse.
- Develop self-confidence, self-esteem, and own identity.
- Develop ability to interact with peers, siblings, and adults.
- Continue process of separating from family.
- Develop sense of responsibility for others.
- Be responsible for school performance.
- Develop good oral and written language skills.

References: American Academy of Pediatrics Anticipatory Guidance; Bright Future Guidelines for Health Supervision of Infants, Children and Adolescents, and the Memory Book

5.5 Screening & Lab Work Procedures

Note: A Medicaid screening chart can be found in Appendix B. This chart provides quick reference to required sections of the student's medical chart for the Cool Kids program.

5.5.1 DEVELOPMENTAL SCREENING TOOL, AGES 6-12

PURPOSE

- To determine if a student over 6 years of age is growing or developing within a normative pattern in the areas of gross motor, fine motor adaptive, personal, social, and language behavior.
- To identify students who have significant deviations from the norm.
- To provide clues for identifying the need for intervention and/or supportive/advisory counseling for parents/guardians, caretakers, and/or children and youth.

PROCEDURE

The developmental assessment form approved by the Division of Medicaid may be used to perform a developmental assessment, using the general guidelines from the Denver procedure for considerations and referral. The Denver Development Test can be found in Section 2.5.

5.5.2 HEMATOCRIT (HCT)/HEMOGLOBIN (HGB) DETERMINATION

PURPOSE

Measurement of the volume of packed red cells (Hct) or the blood hemoglobin (Hgb) as steps to investigate anemia.

EQUIPMENT NEEDED

- Alcohol sponges
- Dry sponges
- Bandage
- Lancet
- Gloves

Plus equipment below according to the method used:

HCT

- Hematocrit tubes
- Seal ease
- Centrifuge
- Hematocrit reader

HGB

- Hemocue machine
- Cuvette



PROCEDURE

- Assemble equipment, wash hands and put on gloves.
- Select the side of the finger tip of the middle or ring finger.
- Cleanse the site with alcohol and wipe dry with a cotton ball or gauze.

HCT

- Obtain a HCT tube from the container.

HGB

- Remove a cuvette from the vial with a dry hand and replace the cap tightly to avoid humidity damage to the remaining cuvettes.
- Hold the student's finger securely so that the finger tip becomes red.
- Grasp the lancet between the thumb and index finger and make one firm stick. The lancet has a flange to prevent it from being inserted too deeply; however, the depth of the puncture is important to obtain good capillary flow. It is easier to stick adequately only once than have to repeat the stick.
- Wipe away the first two or three drops of blood with a dry gauze or cotton ball. If necessary, apply light pressure on the finger or heel opposite the puncture site until a drop of blood appears. Avoid squeezing or massaging the site to prevent too much plasma from diluting the specimen.

Hematocrit Collection

- Fill the hematocrit tube to the marked fill line. If air bubbles appear, discard the tube and begin again. Blood flow into the tube is controlled by your index finger being on (to stop the flow) or off (to continue flow) the top of tube.
- Holding the tube between the thumb and middle finger with your index finger over the tube, remove tube from the student's finger and dry the tip of the tube.
- Place dry cotton on the student's finger. Instruct the student to hold it tightly. Place a bandage over the cotton ball if the student is an infant, instructing the mother to remove this as soon as bleeding stops. Students will quite often ask for an alcohol sponge. **DO NOT USE THIS.** Remember alcohol promotes bleeding.
- Insert the tip into seal ease being careful not to break the tube with too much pressure. Repeat this several times until adequate clay is in the tube.
- Sealant should be discarded when punctured enough times that air bubbles form. If not changed, air bubbles will appear in newly collected tubes.
- Place the tube in the centrifuge, secure the top, and set the timer for the time specified according to directions with the centrifuge. If there are no directions with the centrifuge, set the time for five (5) minutes.
- When testing multiple samples, make certain each tube is specifically identified.
- Remove the tube from the centrifuge. Place the bottom level of blood on the bottom line of the reader (0% line). Roll the tube to the point that the top level of plasma is on the top line (100%). Take the reading accurately at the point where packed cells and plasma meet.
- Discard the tube in a sharps container.
- Document results of the test in appropriate space(s). Document nursing management and plan.

Hemoglobin Collection

- Allow a large drop of blood to form on the tip of the finger. The drop must be large enough to fill the cuvette completely in one continuous motion. Fill the cuvette by introducing the pointed tip of the cuvette into the middle of the drop of blood. The cuvette should be allowed to fill by capillary action in one continuous motion. Cuvette must be completely filled or discard and repeat testing.
- Wipe off any excess blood from the outside of the cuvette, being careful not to



touch the curved edge. This may be done by laying the cuvette on a tissue or gauze and allowing any excess to be absorbed.

- Place dry cotton on the student's finger. Instruct the student to hold it tightly. Place a bandage over the cotton ball if the student is an infant, instructing the mother to remove this as soon as bleeding stops. Students will quite often ask for an alcohol sponge. **DO NOT USE THIS.** Remember alcohol promotes bleeding.
- Place the filled cuvette in the holder within 10 minutes after collection and insert slide arm to the "Measuring" position. The results will be displayed in approximately 45 seconds and will remain displayed for 4 minutes or until the slide arm is pulled out for removal of the cuvette.
- Discard the cuvette in a sharps container.
- Turn the power switch to "off" at the conclusion of all testing for the day.
- Document results of the test in appropriate space(s). Document nursing management and plan.

5.5.3 LEAD SCREENING

PURPOSE

Lead poisoning in children should be approached as a chronic disease because of the long term high-dose exposure to which children might be subjected. Lead-based paint, both interior and/or exterior on older deteriorating houses, is the primary source of ingested lead for children. Dust, dirt, and other environmental factors may also constitute lead exposure sources. Because of the numerous sources and the adverse and sometimes irreversible effects on several body systems, it is very important to screen children in high-risk areas for this entity.

This section contains a description of a generally accepted method for obtaining samples for lead screening. However, the school nurse in Mississippi should be familiar with the most current method recommended by the Department of Health.

EQUIPMENT NEEDED

- 3 cc syringe with 25G5/8 needle or Butterfly needle 23G
- Purple top tube (3 mL), microtainer, or a lead collection disc
- Alcohol sponge
- Tourniquet
- Bandage
- Biohazard bag
- Gloves
- Sharps container

PROCEDURE

Collection of Specimen

- Venipuncture is preferred. If unable to obtain a venous specimen, a capillary specimen can be used for screening. Follow-up of all elevated blood lead levels should be venipuncture. Syringe/needle unit should not be used.

Collection of a Venipuncture Sample

- Refer to venipuncture procedure.

Collection of Capillary Blood Samples

- Wash hands and put on gloves. If the gloves are coated with powder, rinse off with tap water.
- Student's hand should be washed thoroughly with soap and then dried. If water is unavailable, foam soaps can be used without water. If desired, a brush can be used for cleaning the finger. Once washed, the finger must not be allowed to come into contact with any other surface, including the student's other fingers. If



the student has to wait for the blood collection procedure, cover the student's hand with a paper towel to prevent student from getting hand contaminated.

- Grasp the finger that has been selected for puncture between the thumb and index finger, with the palm of the student's hand facing up.
- If not done during washing, massage the fleshy portion of the finger gently.
- Clean the ball or pad of the finger to be punctured with an alcohol swab. Dry the fingertip using sterile gauze or cotton ball.
- Grasp the finger and quickly puncture it with a sterile lancet in a position slightly lateral of the center of the fingertip.
- Wipe off the first droplet of blood with the sterile gauze or cotton ball.
- If the blood flow is inadequate, gently massage the proximal portion of the finger and then press firmly on the distal joint of the finger. A well-beaded drop of blood should form at the puncture site. (Do not let the blood run down the finger or onto the fingernail.)
- Continue to grasp the finger, touch the tip of the collection microtainer to the beaded drop of blood.
- Draw the blood into the microtainer, maintaining a continuous flow of blood. When full, cap or seal the microtainer as appropriate.
- Agitate the specimen to mix anticoagulant through the blood and prevent clotting.
- Stop the bleeding and cover the finger with a bandage.

Submission of Specimen to Laboratory

- Specimens for blood lead levels are to be submitted to an appropriate laboratory as follows:
 - Specimens should be clearly labeled with student's name and Medicaid number.
 - Laboratory request form must be completed with requested information.
 - Place the specimen in a plastic bag. Do not place any other type of specimens in the same bag with blood lead levels.
 - Keep a log or tickler file of blood lead specimens collected to verify results.

5.5.4 URINE SCREENING (ROUTINE URINALYSIS)

PURPOSE

Because urine is so easily obtained, it is used for many screening tests. Most of these tests are easily done and can be performed and interpreted by the nurse or a trained paraprofessional. Basically, urine is screened macroscopically, chemically, and microscopically. Macroscopic inspection of urine includes observation of color, clarity, and odor. Chemically, urine is tested for pH, specific gravity, and a variety of elements, (e.g., protein or glucose). Finally, microscopic examination is usually done by the laboratory for items like white cells or casts.

Blood and body fluid precautions should be observed as necessary in handling and/or testing urine.

Collection of urine as described is a generally accepted procedure. However, the school nurse should also be familiar with the specific procedure for specimen collection for the lab where the specimen will be processed.

EQUIPMENT NEEDED

- A paper cup containing water or antiseptic solution
- 4-5 cotton balls
- A specimen container
- Reagent strips as determined by lab procedures



- Chart provided with reagent strips

PROCEDURE

Collection of specimen (female)

- Instruct student to cleanse genital area using the front-to-back, one-stroke method prior to the collection of the specimen.
- Either clean water or an antiseptic solution should be used to cleanse the genital area.
- Specimen should be collected in a clean container.

Collection of specimen (male)

- Penis should be cleansed using either clean water or an antiseptic solution.
- Specimen should be collected in a clean container.

Testing of specimen

- Test according to manufacturer's directions.
- Specimen should be tested within one (1) hour of collection.
- Results are interpreted according to chart provided by the manufacturer.
- Record all findings including color, odor, etc., carefully on patient record.

5.5.5 BACTERIURIA SCREENING USING CLEAN-CATCH URINE SPECIMEN

Urinary tract infections rank second only to respiratory tract infections in frequency of occurrence in students. Infants and students, however, do not always present with symptoms of urinary tract infection. For this reason, screening for bacteriuria should be seriously considered for young girls and high-risk infants and students.

PURPOSE

To secure a clinically effective voided specimen for urinalysis. This procedure requires patient instruction and assistance with the students.

EQUIPMENT NEEDED

- Antiseptic solution
- Cotton sponges
- Sterile specimen container

PROCEDURE

Male Student

- Instruct the student to expose glans and cleanse area around meatus. Wash area with a mild antiseptic solution.
- Allow the initial urinary flow to escape.
- Collect the midstream urine specimen in a sterile container.
- Avoid collecting the last few drops of urine.

Female Student

- Instruct the student to separate her labia and cleanse the area around the urinary meatus with cotton sponges liberally soaked with antiseptic solution using the front-to-back, one-stroke method.
- While the student keeps her labia separated, instruct her to void forcibly.
- Allow initial urinary flow to drain into the toilet and then catch the midstream specimen in a sterile container. Avoid collection of last few drops of urine.

Shipping the Sample

- Send the specimen to the laboratory immediately, following lab directions. Submit in a urine transport tube.



5.5.6 VENIPUNCTURE

PURPOSE

To obtain blood specimens for laboratory analysis. See referral laboratory procedures for the amount of blood, type container and lab request needed.

EQUIPMENT NEEDED

- Isopropyl Alcohol 70%
- Tourniquet
- Vacutainer
- Vacutainer cuff
- Multi-sample vacutainer needles
- Disposable syringe/needle*
- Appropriate lab form with identification data
- Appropriate lab container
- Gloves
- Sharps container
- Bandages

PROCEDURE

- Select well-lit work area.
- Place student in comfortable position.
- Wash hands and put on gloves.
- Observe for accessible veins. Arms are usual locations. (The median cephalic veins tend to roll and slip away from the needle. If accessible, the median basilic vein is preferable).
- Cleanse the skin with isopropyl alcohol 70% and allow to dry.
- Place tourniquet approximately 2-4 inches above the selected site. Have student maintain extension of arm and make a fist.
- Palpate selected vein noting firmness, elasticity, and absence of pulsation.
- Hold the vacutainer with protective needle sheath removed.
- Stabilize the vein by grasping the student's arm from underneath with the non-dominant hand.
- Insert the needle, bevel side up, at a 45 degree angle. Insert about 1/8-1/4 inch below the venipuncture site and at a point in direct line with the course of the vein.
- Once the skin is penetrated, decrease the angle of the needle so that it is almost parallel to the skin without touching the skin.
- Direct needle slowly into vein by continued forward pressure.
- When using a needle and syringe and the needle is in vein, hold syringe steady and withdraw plunger sufficiently to remove quantity of blood required for test(s) ordered. When using vacutainer, blood will flow into tube when vein is punctured and the tube is gently pushed into cuffed end of needle. Loosen tourniquet to avoid hematoma.
- Instruct patient to relax fist but do not move arm.
- Place dry cotton/gauze pledget over site of puncture.
- Hold plunger or vacutainer steady and withdraw needle quickly straight back without movement in any other direction to avoid injury to the vein.
- Immediately press firmly over site of puncture.
- Have patient continue to apply this pressure until bleeding has stopped. A bandage may then be applied.

ALTERNATIVE PROCEDURE

- When using needle and syringe do not remove the stopper to fill the laboratory tubes. Puncture the diaphragm of the stopper on the tube with the syringe needle and allow the blood to flow slowly into the tube. Never force blood into a tube. When blood is to be oxalated, mix thoroughly by gentle rotation.
- Dispose of needle and/or syringe unit in a sharps container.



- Label specimens and complete the appropriate lab requests. Package specifications in the proper container for mailing.
- Remove gloves and wash hands.
- Record in patient's record.
- Hemolysis of blood specimens is prevented by avoidance of proximity to heat and avoidance of force in expelling blood from syringe.
- Any blood-contaminated area should be cleaned with full-strength bleach immediately.

*Note: A syringe/needle unit should not be routinely used for this procedure. However, for those unusual circumstances that dictate the need to use the syringe/needle, extreme precaution must be used.



APPENDIX A

A.1 Recommendations For The Control Of Head Lice In Schools

A.1.1 TREATMENT

INDIVIDUAL

Several effective pediculicides (lice-killing products) are available such as Nix® (permethrin) creme rinse (10 minute hair rinse) which is available over the counter and has ovicidal (egg or nit-killing) capability. It is the only over-the-counter pediculicide covered by Medicaid. The pyrethrin/pyrinates products (10 minute shampoos) include such products as Rid®, A-1000®, R&C®, Clear® and Triple-X® and are available over the counter at pharmacies. Kwell® (1% lindane), a 4 minute shampoo, requires a prescription. Central nervous system toxicity with lindane has been documented with prolonged administration. Ovide® lotion (Malathion 0.5%) has been re-approved by the Food and Drug Administration (FDA) as a prescription drug for the treatment of head lice infestation in the United States. Treatment with any approved pediculicidal (lice-killing) product should be adequate.

One Treatment vs. Two Treatments

Most products require two treatments. An initial treatment will kill adult and larval lice, but will not kill all the eggs. A second treatment 7 to 10 days later, after the eggs left by the first treatment have all hatched, will kill the newly hatched lice before they mature and reproduce and will complete the treatment process. Nix® requires only one treatment since it is an ovicidal (also kills the eggs or nits); however, a second treatment is desirable since the product is not likely to kill 100% of the nits. Ovide® lotion is also ovicidal and requires a second treatment 7 to 10 days after the first one only if crawling lice are seen.

Parents/guardians should be required to furnish evidence of the second treatment no earlier than 7 days and no longer than ten days after the first. The school may choose to require evidence of a second treatment even if the treatment is Nix®. The same evidence, a note from parent/guardian or empty bottle with label, should be required.

Retreatment

Pediculicides should kill lice soon after application. However, in some situations (e.g., a person is too heavily infested, pediculicide is used incorrectly, reinfestation or possible resistance to the medication), the lice may still be present. Immediate retreatment with a different class or type of pediculicide is generally recommended if live lice are detected on the scalp 24 hours or longer after the initial treatment.

Removal Of Nits

The need to remove nits is somewhat controversial. However, removing the nits may prevent reinfestation by those nits hatching that may have been missed by the treatment. It may also decrease confusion about infestation when the person who has been treated is being re-examined for the presence of head lice, and it will avoid embarrassment to the infested child. Nits may be removed by the use of a nit comb or by manually ("nit-picking") removing them. Most of the nits that are easily seen and more easily removed with the nit comb are those that are grayish-



white in color, have grown out one or more inches on the hair shaft and have already hatched. The new, viable nits are closer to the scalp (within about 1/4 inch) and are more of a brownish color. These nits are firmly attached to the hair shaft with a glue-like substance. There are commercial products available to help loosen the glue-like substance for easier removal.

FAMILY

Persons living in the same home as a child with head lice should be examined for lice by a family member who knows how or by someone else knowledgeable about lice. Any infested persons should be treated as described above. The one exception is any person over two years of age who shares a bed with an infested child: these persons should be treated presumptively. If the child is less than two years of age, consult the child's physician for treatment recommendations. (The safety of head lice medications has not been tested in children two years of age and under.)

ENVIRONMENTAL CONTROL

Clothing, cloth toys, and personal linens (such as towels and bedclothes used within the previous 48 hours by an infested person) can be disinfected by washing in hot water and drying in the dryer using hot cycles. Non-washables should be dry cleaned, or stored in air-tight plastic bags for 2 weeks. Spraying with insecticides is usually not necessary. If there are cloth surfaces, such as furniture or carpet, with which the infested person's hair has had extensive contact, they should be vacuumed thoroughly.

**Note: Use of specific product names is for example purposes only, and is not intended as endorsement of specific brands over others.*

A.1.2 SAMPLE LETTER TO PARENT/GUARDIAN OF CHILD WITH HEAD LICE

Sample letter for copying provided on the following page.



Dear Parent or Guardian:

Your child has been found to have head lice. Head lice do not transmit disease and they do not result from lack of cleanliness. School age children get them commonly, sometimes more than once.

You should consult a pharmacist or your child's physician for a recommendation about which of several effective products to use to treat your child. As soon as you have treated your child with an approved pediculicidal (lice-killing) product, he or she may return to school. To be readmitted to school, your child needs a note from you stating the name of the product you used and the date of use, or you may send the empty bottle of the product used, with the label on it, to the school. Most products must be used twice, once to start and then again not less than 7 days and not more than 10 days after the first treatment. Your child does not need to miss any school after the first treatment, but if the product that you use requires a second treatment, you must send a second note with your child one week to 10 days after the first treatment stating the date of the second treatment and the product used.

There are 3 steps in the successful management of head lice:

1. Treatment (killing the lice with an approved medical treatment) - It is very important to follow the instructions given by your physician when using prescription medication. If you use over-the-counter medication, you should follow the package directions. The other members of your family should be checked for head lice and treated if they are found to have them. Persons over 2 years of age who sleep in the same bed with the infested child should be treated regardless. For children less than 2 years of age, consult the child's physician for treatment recommendations.

2. Removal of the nits - The Mississippi State Department of Health recommends that you attempt to remove the nits to avoid reinfestation by those nits hatching that may have been missed by the treatment. The nits can be removed by dividing the hair into sections and working each section separately. Look for small grayish-white or yellowish-brown specks that are attached to the hair shaft close to the scalp. Nits are attached to the hair shaft very firmly with a glue-like substance and are not easily brushed out. They must be picked out with the fingernails or combed with the nit comb that usually comes with the lice-killing product. This can be done outdoors under bright sunlight or indoors with a good reading lamp as nits are sometimes hard to see.

3. Environmental control - Clothing and personal linens (such as towels and bedclothes used by infested persons) should be machine washed (use hot water) and dried (on hot); non-washables can be dry cleaned or stored in an air-tight plastic bag for 2 weeks. Cloth-covered furniture and carpet that have been in extensive contact with an infested person's head should be thoroughly vacuumed. Lice-killing sprays are generally not necessary.

Principal

Date



APPENDIX B

B.1 MEDICAID CHARTS

The following charts can be copied and placed in each student's folder for a quick reference to which areas have to be included in the student's physical for the Cool Kid's program. It shows the age at which each component is to be completed. This chart can be used with any student.



MEDICAID SCREENING CHART FOR MIDDLE CHILDHOOD

AGE	15mo	18mo	24mo	3yrs	4yrs	5yrs	6yrs	8yrs	10yrs
History	I	I	I	I	I	I	I	I	I
Ht/Wt	I	I	I	I	I	I	I	I	I
Head Circ.	I	I	I						
BP				I	I	I	I	I	I
Vision	S	S	S	S/O	O	O	O	O	O
Hearing ^{5,6}	S	S	S	S/O	O	O	O	O	O
Developmental Assessment ⁷ (Denver II to age 6)	I	I	I	I	I	I	I	I	I
Nutrition	I	I	I	I	I	I	I	I	I
Physical Exam ⁸	I	I	I	I	I	I	I	I	I
Metabolic Screen ¹⁰ (Sickle Cell Status) ⁹									
Immunization ^{8,11}	I	I	I	I	I	I	I	I	I
Hgb or Hct ¹³	I	I	I	I	I	I	I	I	I
Urinalysis (Dipstick) ¹⁴			I	I	I	I	I	I	I
Lead Screen (at risk) Verbal Risk Assessment (q visit) ¹²	I	I	I	I	I	I	I		
TB Test (at risk) ¹⁵	I	I	I	I	I	I	I	I	I
STD Screen (at risk) ¹⁶									
Anticipatory Guidance ^{18,19}	I	I	I	I	I	I	I	I	I
Dental Referral ²⁰	I	I	I	I	I	I	I	I	I
Scoliosis								I	I
Adolescent Counseling (age 9†)									I

Key: I = to be performed, I = to be performed if at risk, S = subjective by history, O = objective standard testing method

These recommendations represent a consensus by the Committee on Practice and Ambulatory Medicine in consultation with national committees and sections of the American Academy of Pediatrics (AAP). The Committee emphasizes the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care. These recommendations do not indicate an exclusive course of treatment or serve as a standard of medical care.

Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in satisfactory fashion. Additional visits may become necessary if circumstances suggest variations from normal.

Superscript guideline codes:

1. Breastfeeding encouragement and support should be offered.
2. Any newborns discharged less than 48 hrs after delivery.
3. Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits.
4. If a child comes under care for the first time at any point on the schedule, or if any items are not accomplished at the suggested age, the schedule should be brought up to date at the earliest possible time.
5. If the patient is uncooperative, re-screen within six months.
6. The Joint Committee on Infant Hearing has identified patients at significant risk for hearing loss. All children meeting these criteria should be objectively screened.
7. By history and appropriate physical examination; if suspicious, by specific objective developmental testing.
8. At each visit, a complete physical examination is essential, with infant totally undressed, older child undressed and suitably draped.
9. These may be modified, depending upon entry point into schedule and individual need.
10. Metabolic screening (eg. Hyperthyroidism, Hemoglobinopathies, PKU, CAH, Galactosemia) should be done according to state law.
11. Schedule (s) per the Committee on Infectious Disease, published periodically in pediatrics.
12. Blood lead screen per AAP statement Lead poisoning: From Screening to Primary Prevention (1993).
13. All menstruating adolescents should be screened.
14. Conduct dipstick urinalysis for leukocytes for male and female adolescents.
15. TB testing per AAP statement Screening for Tuberculosis in Infants and Children (1994). Testing should be done upon recognition of high-risk factors. If results are negative but high-risk situation continues, testing should be repeated on an annual basis.
16. All sexually active patients should be screened for sexually transmitted disease (STDs).
17. All sexually active females should have a pelvic examination. A pelvic examination and routine Papanicolaou (Pap) smear should be offered as part of preventive health maintenance between the ages of 18 and 21 years.
18. Appropriate discussion and counseling should be an integral part of each visit for care.
19. From birth to age 12, refer to AAP's injury prevention program (TIPP) as described in A Guide to Safety Counseling in Office Practice (1994).
20. Earlier dental evaluations may be appropriate for some children. Subsequent examinations as prescribed by dentist.

MEDICAID SCREENING CHART FOR ADOLESCENCE/EARLY ADULTHOOD

AGE (in years)	11	12	13	14	15	16	17	18	19	20	21
History	t	t	t	t	t	t	t	t	t	t	t
Ht/Wt	t	t	t	t	t	t	t	t	t	t	t
Head Circ.											
BP	t	t	t	t	t	t	t	t	t	t	t
Vision	0	0	0	0	0	0	0	0	0	0	0
Hearing ^{5,6}	0	0	0	0	0	0	0	0	0	0	0
Developmental Assessment ⁷	t	t	t	t	t	t	t	t	t	t	t
Nutrition	t	t	t	t	t	t	t	t	t	t	t
Physical Exam ⁸	t	t	t	t	t	t	t	t	t	t	t
Metabolic Screen ¹⁰ (Sickle Cell Status) ⁹											
Immunization ^{9,11}	t	t	t	t	t	t	t	t	t	t	t
Hgb or Hct ¹²	t	t	t	t	t	t	t	t	t	t	t
Urinalysis (Dipstick) ¹⁴	t	t	t	t	t	t	t	t	t	t	t
Lead Screen (at risk)/Verbal Risk Assessment (q visit) ¹²											
TB Test (at risk) ¹⁵	t	t	t	t	t	t	t	t	t	t	t
STD Screen (at risk) ¹⁶	t	t	t	t	t	t	t	t	t	t	t
Pelvic Exam (at risk) ¹⁷	t	t	t	t	t	t	t	t	t	t	t
Anticipatory Guidance ^{18,19}	t	t	t	t	t	t	t	t	t	t	t
Dental Referral ²⁰	t	t	t	t	t	t	t	t	t	t	t
Scoliosis	t	t	t	t	t	t	t	t	t	t	t
Adolescent Counseling (age 9†)	t	t	t	t	t	t	t	t	t	t	t

Key: t = to be performed, † = to be performed if at risk, S = subjective, by history, 0 = objective standard testing method

These recommendations represent a consensus by the Committee on Practice and Ambulatory Medicine in consultation with national committees and sections of the American Academy of Pediatrics (AAP). The Committee emphasizes the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care. These recommendations do not indicate an exclusive course of treatment or serve as a standard of medical care.

Each child and family is unique; therefore, these **Recommendations for Preventive Pediatric Health Care** are designed for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in satisfactory fashion. **Additional visits may become necessary** if circumstances suggest variations from normal.

Superscript guideline codes:

1. Breastfeeding encouragement and support should be offered.
2. Any newborns discharged less than 48 hrs after delivery.
3. Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits.
4. If a child comes under care for the first time at any point on the schedule, or if any items are not accomplished at the suggested age, the schedule should be brought up to date at the earliest possible time.
5. If the patient is uncooperative, re-screen within six months.
6. The Joint Committee on Infant Hearing has identified patients at significant risk for hearing loss. All children meeting these criteria should be objectively screened.
7. By history and appropriate physical examination; if suspicious, by specific objective developmental testing.
8. At each visit, a complete physical examination is essential, with infant totally undressed, older child undressed and suitably draped.
9. These may be modified, depending upon entry point into schedule and individual need.
10. Metabolic screening (eg, Hypertension, Hemoglobinopathies, PKU, CAH, Galactosemia) should be done according to state law.
11. Schedule (s) per the Committee on Infectious Disease, published periodically in pediatrics.
12. Blood lead screen per AAP statement Lead poisoning: From Screening to Primary Prevention (1993).
13. All menstruating adolescents should be screened.
14. Conduct dipstick urinalysis for leukocytes for male and female adolescents.
15. TB testing per AAP statement Screening for Tuberculosis in Infants and Children (1994). Testing should be done upon recognition of high-risk factors. If results are negative but high-risk situation continues, testing should be repeated on an annual basis.
16. All sexually active patients should be screened for sexually transmitted disease (STDs).
17. All sexually active females should have a pelvic examination. A pelvic examination and routine Papanicolaou (Pap) smear should be offered as part of preventive health maintenance between the ages of 18 and 21 years.
18. Appropriate discussion and counseling should be an integral part of each visit for care.
19. From birth to age 12, refer to AAP's injury prevention program (TIPP) as described in A Guide to Safety Counseling in Office Practice (1994).
20. Earlier dental evaluations may be appropriate for some children. Subsequent examinations as prescribed by dentist.



APPENDIX C

C.1 Asthma Action Plan

The following charts can be copied and is to be used as a tool for evaluating asthma conditions. It is provided by the American Lung Association.



Asthma Action Plan



General Information:

■ Name _____
■ Emergency contact _____ Phone numbers _____
■ Physician/Health Care Provider _____ Phone numbers _____
■ Physician Signature _____ Date _____

Breathing Classification	Triggers	Exercises
<input type="checkbox"/> Mild Intermittent <input type="checkbox"/> Moderate Persistent <input type="checkbox"/> Mild Persistent <input type="checkbox"/> Severe Persistent	<input type="checkbox"/> Colds <input type="checkbox"/> Smoke <input type="checkbox"/> Weather <input type="checkbox"/> Exercise <input type="checkbox"/> Dust <input type="checkbox"/> Air pollution <input type="checkbox"/> Animals <input type="checkbox"/> Food <input type="checkbox"/> Other _____	1. Pre-medication (how much and when) _____ 2. Exercise modifications _____

Green Zone: Doing Well

Peak Flow Meter Personal Best = _____

Symptoms

- Breathing is good
- No cough or wheeze
- Can work and play
- Sleeps all night

Control Medications

Medicine	How Much to Take	When To Take it
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

More than 80% of personal best or _____

Yellow Zone: Getting Worse

Contact Physician if using quick relief more than 2 times per week.

Symptoms

- Some problems breathing
- Cough, wheeze or chest tight
- Problems working or playing
- Wake at night

Continue control medicines and add:

Medicine	How Much to Take	When To Take it
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

Between 50 to 80% of personal best or _____ to _____

If your symptoms (and peak flow, if used) return to Green Zone after one hour of the quick relief treatment, THEN

- ☐ Take quick-relief medication every 4 hours for 1 to 2 days
- ☐ Change your long-term control medicines by _____
- ☐ Contact your physician for follow-up care

If your symptoms (and peak flow, if used) DO NOT return to the GREEN ZONE after 1 hour of the quick relief treatment, THEN

- ☐ Take quick-relief treatment again
- ☐ Change your long-term control medicines by _____
- ☐ Call your physician/Health Care Provider within _____ hours of modifying your medication routine

Red Zone: Medical Alert

Ambulance/Emergency Phone Number: _____

Symptoms

- Lots of problems breathing
- Cannot work or play
- Getting worse instead of better
- Medicine is not helping

Continue control medicines and add:

Medicine	How Much to Take	When To Take it
_____	_____	_____
_____	_____	_____
_____	_____	_____

Peak Flow Meter

Between 0 to 50% of personal best or _____ to _____

Go to the hospital or call for an ambulance if

- ☐ Still in the red zone after 15 minutes
- ☐ If you have not been able to reach your physician/health care provider for help
- ☐ _____

Call an ambulance immediately if the following danger signs are present

- ☐ Trouble waking/talking due to shortness of breath
- ☐ Lips or fingernails are blue



APPENDIX D

D.1 Hearing & Vision Screening Form

The following form may be copied and used for Hearing and Vision screening.



HEARING/VISION SCREENING RESULTS

DI-SE-F55

Revised, August 1992

Student Name:	Age:
School:	District:

PART I**A. HEARING SCREENING**

Instrument:

	1 st Screening	2 nd Screening
PASS		
FAIL		
EXAMINER		
DATE		

B. VISION SCREENING

Instrument:

	1 st Screening	2 nd Screening
Screened wearing glasses?	YES NO	YES NO
Both Eyes		
Right Eye -- Far Vision		
Left Eye -- Far Vision		
Near Vision	PASS FAIL	PASS FAIL
FIRST SCREENING	EXAMINER DATE	
SECOND SCREENING	EXAMINER DATE	

PART II

If an attempt is made to condition a severely handicapped child for hearing/vision screening and no response can be obtained, then a quantitative description of the child's hearing/vision must be completed by an individual who works with the child.

A. HEARING

EXAMINER:

DATE:

	YES	NO
1. Does subject respond to noise, i.e. ringing bell, rattle, etc.?		
2. Does subject respond to name when called?		
3. Does subject interact verbally or with gestures?		
4. Can subject identify body part on verbal command?		
5. Does subject respond to simple verbal commands?		
6. Can subject point to person or objects when asked?		
7. Is imitation of speech present?		
8. Does subject's eyes and/or head turn toward a voice?		
9. Does subject react to (not necessarily stop) an activity when he hears "No!"?		
10. Does subject attend to songs sung to him?		

B. VISION

EXAMINER:

DATE:

	YES	NO
1. Does subject follow an object with eyes?		
2. When using a pencil, crayon, paintbrush, etc., does subject follow markings with his eyes?		
3. Does subject pick up objects from table or floor?		
4. Does subject reach for objects when handed to him?		
5. Does subject grasp objects unaided or without direction from teacher?		
6. Does subject look at an object when placed before him?		
7. Does subject look at pictures in a book?		
8. Do eyes and head turn toward a light that is introduced?		
9. Does subject watch own hand movements?		
10. Does subject look at self in mirror?		
11. Does subject use a visual searching technique when objects are placed out of sight?		

Describe additional behaviors in hearing/vision that should be considered in assessment and educational programming:

**CRITERIA FOR
SCHOOL NURSE (REGISTERED NURSE)¹
& LICENSED PRACTICAL NURSE WORKING IN THE SCHOOL SETTING²**

QUALIFICATIONS:

1. Possess a valid Mississippi Nursing License
2. Possess a minimum of one year of work experience in the health care area
3. Possess good verbal and written communication skills
4. Possess organizational and time management skills, and the ability to communicate well with children, parents, school faculty and administration
5. Possess the ability to work independently according to all nursing practice standards
6. Such alternatives to the above qualifications as the District School Board may find appropriate and acceptable

JOB GOAL: Ensure the health of all students as a means to ensure academic success

PERFORMANCE RESPONSIBILITIES:

The major focus of school nursing services is the prevention of illness and disabilities and the early detection and correction of health problems.

The school nurse promotes and protects the health status of students and staff through functions in all areas of Coordinated School Health.

A. HEALTH SERVICES

1. Provide health assessments
 - i. Obtain a health history
 - ii. Screen and evaluate vision, hearing, scoliosis, dental and others as directed
 - iii. Observe students as required for development and health patterns/concerns
 - iv. Participate in school registration process to procure parental consent and health insurance information
2. Develop and implement health plans and procedures
 - i. Maintain a confidential cumulative health record for each student
 - ii. Interpret the health status of students to parents and school personnel
 - iii. Initiate and follow referrals for intervention and/or remediation
 - iv. Plan and implement health management protocols and modification of school programs and environment

3. Provide direct nursing intervention
 - i. Administer appropriate level of first aid for illness and injury, including CPR
 - ii. Administer/supervise medication and monitor the effects
 - iii. Provide individual health counseling concerning high-risk behaviors
 - iv. Perform skilled nursing functions

B. HEALTH EDUCATION

1. Provide health education for students, staff and parents
 - i. Coordinate and participate in student support groups and activities
 - ii. Promote and interpret health careers which may include participation of school in allied health programs
 - iii. Teach health topics as outlined in the Mississippi Comprehensive Health Framework which will include but not be limited to tobacco, alcohol and substance abuse prevention
2. Serve as a resource person in health education
 - i. Participate in health curriculum planning and evaluation
 - ii. Promote drop-out prevention programs

C. HEALTHY SCHOOL ENVIRONMENT

1. Recommend provisions for a safe, healthy school environment
2. Serve on school committees to develop and implement safety programs
3. Promote and assist in control of communicable diseases
4. Ensure that each student complies with the immunization requirements of the State of Mississippi
5. Confirm that students have medical emergency cards on file
6. Participate in wellness projects

D. PHYSICAL EDUCATION

1. Promote healthy physical education, sports policies and practices
2. Serve as a health resource to the physical education staff

E. NUTRITION SERVICES

1. Support healthy food service programs
2. Serve as a health resource to school food service staff

F. COUNSELING, PSYCHOLOGICAL & SOCIAL SERVICES

1. Provide crisis intervention for emotional/physical disturbances
2. Counsel students as needed

G. HEALTH PROMOTION FOR STAFF

1. Screen and counsel school employees as needed
2. Administer/provide influenza vaccinations for staff upon request
3. Provide staff with in-service training programs on health-related issues

H. FAMILY/COMMUNITY INVOLVEMENT

1. Work with agencies and civic clubs in providing assistance to indigent children
2. Make home visits as necessary

I. COLLECT DATA AS ESTABLISHED BY THE MISSISSIPPI DEPARTMENT OF EDUCATION/OFFICE OF HEALTHY SCHOOLS AND REPORT TO SAME ENTITY MONTHLY (See Program Evaluation & Measurement document.)

J. ATTEND ANNUAL TRAINING MEETING SPONSORED BY THE MISSISSIPPI DEPARTMENT OF EDUCATION/OFFICE OF HEALTHY SCHOOLS

¹It is the position of the Mississippi Board of Nursing that the scope of practice of the school nurse requires the knowledge of the RN (Registered Nurse). A LPN (Licensed Practical Nurse) may not function in the role of "school nurse."

²A Licensed Practical Nurse working in the school setting is functioning within her scope when she is working under the direct supervision of a RN who is either physically present on the premises or available at all times to the LPN.

PROGRAM EVALUATION & MEASUREMENT

SCHOOL NURSE DATA COLLECTION (MONTHLY)

1. Total student visits
2. Total students seen for illness
 - a. Students returned to class
 - b. Students sent home
 - c. Students sent for medical care
3. Total students seen for injury
 - a. Students returned to class
 - b. Students sent home
 - c. Students sent for medical care
4. Medications administered or verified based upon MD order
 - a. EpiPen
 - b. Injectable Insulin
 - c. Glucagon
 - d. Inhaler Medications
 - e. ADD Medications
 - f. Antibiotics
 - g. Psychiatric Medications
 - h. Asthma Medications
 - i. Seizure Medications
 - j. Paperwork Verified
 - k. Other: _____
5. Special Nursing Procedures based upon MD order
 - a. Urinary Catheterization or Assistance
 - b. Tracheostomy Care
 - c. Gastric Tube Care including feeding
 - d. Glucose Testing
 - e. Ventilator Care
 - f. Nebulizer Treatment
 - g. Peak Flow Monitoring
 - h. Other: _____
6. Total staff visits
7. Staff seen for illness
 - a. Staff sent home
 - b. Staff sent back to work
 - c. Staff sent for medical care
8. Total staff seen for injury
 - a. Staff sent home
 - b. Staff sent back to work
 - c. Staff sent for medical care
9. Total Screenings
10. Total Hearing Screening
11. Total Vision Screening

12. Total Growth Measurements
13. Total Blood Pressure
14. Total Dental
15. Total Scoliosis
16. Total Coordination and Assistance with Sports Physicals
17. Total EPSDT Physicals
18. Total SPED Evaluations/Physicals
19. Total Medical Referrals
 - a. Vision
 - b. Hearing
 - c. Weight
 - d. Blood Pressure
 - e. Dental
 - f. Scoliosis
 - g. Medication
 - h. Immunizations
 - i. Other
20. Health Education Lessons/Presentations (number of presentations/number of students attending)
 - a. Alcohol/drug abuse prevention
 - b. Tobacco prevention
 - c. Nutrition Education
 - d. Hygiene
 - e. Oral Health
 - f. Fitness
 - g. Health Related Careers
 - h. Other: _____
21. Health Education/Consultation
 - a. Total students seen
 - b. Total staff seen
 - c. Total parents seen
22. Interventions for Student Absenteeism
 - a. Parent contact
 - b. Referral to Attendance Officer
 - c. Other: _____
23. Environmental Safety Checks
 - a. Playground
 1. Number of playground checks (weekly)
 2. Number of hazardous occurrences discovered and reported
 - b. Buildings
 1. Number of building checks
 2. Number of hazardous occurrences discovered and reported
24. Hazardous Occurrences
 - a. Number in classrooms
 - b. Number in gym
 - c. Number in cafeteria
 - d. Number in bathrooms

- e. Number in hallways
- f. Number in administrative offices

OFFICE OF HEALTHY SCHOOLS REPORTING (ANNUALLY)

1. Number of school nurses and school sites
2. Summary of School Nurse Data Collection
3. Nurse:student ratio data and trends
4. Analysis and correlation of nursing services to Average Daily Attendance, drop-out rate, etc... by location

EVALUATION THROUGH ANNUAL PRACTICE REVIEW

The Office of Healthy Schools will partner with the Mississippi School Nurse Association to sponsor an annual School Nurse Practice Review, mandatory for all school nurses in the state. Objectives of the review would be:

- Discussion of any changes that may have occurred in nursing practice in Mississippi that affect school nursing
- Q & A regarding practice-related issues
- Continuing education and training
- Program evaluation through assessment of both nurses and administration
- Data collection elements and methods